

BENN'S SIX

RARY

1



# EDUCATIONAL THEORIES

By SIR JOHN ADAMS  
M.A., B.Sc., LL.D.

Sometimes University Professor of Education in the  
University of London



LONDON: ERNEST BENN LIMITED  
OVERIE HOUSE, FLEET ST. E.C.

*First published 1927*

MADE AND PRINTED IN GREAT BRITAIN BY  
BILLING AND SONS, LTD., GUILDFORD AND ESSEX

## CONTENTS

CHAPTER		PAGE
I.	EDUCATIONAL THEORY - -	7
II.	FOUNDATIONS OF EDUCATIONAL THEORY -	21
III.	CLASSIFICATION OF EDUCATIONAL THEORISTS -	32
IV.	STANDARDS IN EDUCATION - -	45
V.	THEORIES OF METHOD - -	56
VI.	THE COLLECTIVE ASPECT - -	67
	BIBLIOGRAPHY - - -	78

# EDUCATIONAL THEORIES

## CHAPTER I

### *EDUCATIONAL THEORY*

A CERTAIN confusion often lurks under the term *educational theory*, arising from the fact that there are at least two different professional points of view from which it may be regarded, to say nothing of the lay attitude that also deserves attention. Teachers not unnaturally regard themselves as in a very special sense experts in this matter, and sometimes complain a little bitterly about the interference of outsiders in matters that concern the teaching craft. To be sure there are others in the profession who have no great belief in theory, and, indeed, openly condemn it. An ounce of practice, they complacently tell us, is worth a ton of theory. In the old manuals prepared for those who were in training to be elementary teachers it was customary to fill in at the beginning a small amount of theory, while the rest of the volume swelled out into what was respectfully treated as practice. For reasons to be found in the history of public education in England, elementary teachers were brought up to be more favourable to theory than were the secondary. The latter prided themselves on the knowledge of the subject-matter rather than on their skill in communicating it.

But teachers of all grades tend to make common cause against lay persons who presume to take a hand in the inner things of education. They admit that in

## 8 EDUCATIONAL THEORIES

the administration of education there is need for some degree of business skill, that for this sort of work those who are not professional teachers have a certain fitness, and that a place must be found for them. But of late these administrative persons have begun to talk with authority on education, and professional teachers are getting restive under it.

The truth is that a sharp enough line of demarcation is not drawn between teaching and education. It is not sufficiently realised that education includes teaching as the greater includes the less. Everyone who teaches another is to that extent an educator. We cannot teach without to some extent educating; but we can educate without going through the actual process of teaching. Most teachers are only too willing to claim to be educators. They feel that in the process of communicating knowledge and skill they are producing effects upon character, and are therefore entitled to be called educators, though this term is more commonly used in America than in England. There are, however, types of professional teachers who decline the more general term, and say that they are teachers and nothing more. They communicate a certain amount of information, and with that their responsibility ends.

Obviously we cannot go much further without making up our minds about what education means. The difficulty of this problem is demonstrated by the amount that has been written on the subject. Dr. Murray Butler sets out his solution in his *The Meaning of Education*. Professor J. Welton has a volume on *What do we mean by Education?* Dr. E. C. Moore has a book with the straightforward title *What is Education?* and Sir Stanley Leathes, claiming to be "the arch-examiner," adopts the same title for his book. It will be noticed in reading these and similar books that the tendency is to define education by its end or aim rather than by its processes. For a satis-

## EDUCATIONAL THEORY 9

factory answer to the question implied or stated in all such works we must include both aim and process. Taking the view of the man-in-the-street, we get the simple definition "A preparation for life." People of a religious turn are sometimes inclined to make it run "A preparation for the life to come." Herbert Spencer makes the aim a trifle more specific by speaking of a preparation for "complete living." Other aims suggested run from the humble "preparing the child to earn his living" up to the dignified words of Milton's famous reference in his *Tractate on Education* to "a complete and generous education which fits a man to perform justly, skilfully, and magnanimously all the offices, both private and public, of peace and war."

One of the most famous definitions of education ever given was that supplied by John Stuart Mill in his well-known Rectorial Address delivered before the University of St. Andrew's. He told his audience that in its widest sense education must include "the indirect effects produced on character, and on the human faculties, by things of which the direct purposes are different: by laws, by forms of government, by the industrial arts, by modes of social life; nay, even by physical facts not dependent on human will, by climate, soil, and local position." Later in the address J. S. Mill gathers up his definition in a simpler form that has won much commendation: "The culture which each generation purposely gives to those who are to be its successors, in order to qualify them for at least keeping up, and if possible for raising, the level of improvement which has been attained."

The moment we ask how this is to be done we introduce the problem of the exact nature of education in itself. We must go beyond the problem of the end and look into the means. If we adopt the logical form of definition—genus plus difference—we have little difficulty in finding the appropriate genus. Most people will admit that education is a *process*. The

trouble arises when we seek to mark off this process from all other processes. Probably the best way will be to work round the educational process, analysing out the various elements that may be fairly said to be essential to the accepted meaning of the term.

To begin with, it will be generally admitted that education is a bi-polar process, the two pôles being the teacher-pole and the pupil-pole. No sooner are these terms set down, however, than a feeling of uneasiness arises. It is realised that the terms suggest an undue restriction of the meaning of education. We have already noted the distinction between education and teaching, and now we are speaking of teacher and pupil as if they exhausted the situation. If teacher and educator are not quite synonymous terms, we naturally want to know what is the passive term that corresponds to *educator*. We may write out the statement "As the teacher is to the pupil, so is the *educator* to——" Most people would finish the second part of the proposition with the same word as the first, and, in point of fact, *pupil* is commonly used as the correlate to both *teacher* and *educator*. To maintain clearness of thinking it is, perhaps, well to revive an old seventeenth-century word and speak of the *educand* as the correlate of *educator*. The double form in which the bi-polarity is expressed does not in any way affect the fact that all education is bi-polar, and this fact must be suggested in any working definition we may adopt. The reintroduction of the term *educand* will serve the end of keeping distinct the teaching and the educating aspect of the process.

But while it is true that both teaching and education are bi-polar processes and do not conflict with one another, it does not follow that in either the process necessarily implies two separate persons. The bi-polarity may exist in the experience of one individual. When John Stuart Mill speaks in his description of education of "whatever we do for ourselves and what-

## EDUCATIONAL THEORY · · · II

ever is done for us by others," he takes account of the part we play in our own education. What we do for ourselves is as much a part of education as what others do for us. The important point is that even when there is no external educator and we carry on what is called self-education, we are still carrying on a process that is bi-polar. The self is at the same time educator and educand. This reaction of the self upon itself makes up one of the greatest mysteries of life. The self that is acting and the self that is being acted upon are the same self, one and indivisible. The active aspect is sometimes called subjective, and the passive aspect objective, just as the perceiving mind is called subjective, while the outer world that it perceives is called objective. When we say that education is bi-polar we imply that it is a process that necessarily involves a subjective and an objective aspect, though not necessarily two persons.

Even in the conventional school course it is not necessary to have separate persons taking part all the time. Generally speaking, of course, there are two persons involved. The teacher-pole and the pupil-pole are openly in evidence in the persons of teacher and pupil. To the end of the school period the teacher remains teacher and the pupil remains pupil, but the relation between them does not remain the same. At the earlier stages the teacher is the active member playing the directing rôle, and the pupil is passive so far as direction is concerned. But sooner or later, in almost every school course, the pupil begins to take some interest in the process, to wonder what all this education is about, and to take an intelligent share in the process. As soon as the educand begins to take a hand in the process of educating himself he ceases to be a mere educand, and becomes to some extent an educator. As the process of education goes on, the educand takes to himself more and more of the functions of educator, till towards the end of the school



course he may become predominantly educator, without ceasing to be educand. He combines both functions in his own experience. Nor need the professional teacher resent this change of attitude, for it marks the success of his work. So far from resenting the educand's taking himself in hand, the teacher should welcome it as an indication of the success of the process of education. The teacher's function as educator is to make himself dispensable. When he has attained the goal of getting the educand to take himself in hand and undertake the responsibility for his own education, the teacher-educator may quietly fall back on his teacher function and let himself be used as an instrument by the educand, who has now become educator-educand. Naturally not all educands attain this complete emancipation, but all cases of fairly successful education imply the attainment of some degree of partnership in the education process. It is only in the somewhat rare cases of complete educational failure that the educand remains pure educand all the way through.

Coming now to the actual working of this process that we have discovered to be bi-polar, we find that there are at least three elements that are essential to the concept of education.

The first of these is found in the universally accepted notion that education implies some sort of modification of the educand. The nature of this modification is not at all easy to describe. It is difficult to answer the blunt question: "What is it that is to be modified?" In what is called physical education there is no trouble. The body is there ready to be acted upon and modified in the direction the educator may choose. But once we leave the body the trouble begins. Indeed, even in physical education thoughtful educators are not content to limit themselves to the mere bodily modification. They talk of the spiritual reactions to physical training, and refer to Montaigne's

## EDUCATIONAL THEORY 13

famous proclamation that we are not educating a mind or a body, but a man. Modern psychologists are meeting the same sort of difficulty in their study by speaking of the human being as mind-body or body-mind.

Many teachers get over the difficulty by saying that what is modified by education is *character*. But this rather begs the question by introducing what is not of the essence of the problem. Though education is generally applied to training towards moral ends, and is almost universally understood to imply this direction of its efforts, there may be education that is good as education, but that is applied to bad ends. No one can deny that Fagin's academy as described in *Oliver Twist* was an excellent educational institution, however deplorable the results when viewed from the moral standpoint. So if we regard Machiavelli's *Prince* as an educational treatise, we cannot condemn its methods, though we may be far from approving the matter taught.

"The training of the mind" is a not uncommon description of the process, but we have seen that the body, too, is a legitimate object for the educator. "Training of mind and body," besides being clumsy, makes no provision for non-mental qualities such as the emotions, which are not mental in the technical sense of that term, and are yet coming rather prominently to the front as matter for educational treatment. "Modifying the disposition" carries with it a certain vagueness, since psychologists have not quite made up their minds about the exact meaning to be attached to the term *disposition*. Perhaps its very indefiniteness may make it a useful term to use while psychologists are working out the problem of the nature of temperament and its relation to intellectual and other qualities. We may sum up by claiming that, whatever else it means, education concerns itself with the modification of that organic whole

represented by what is called human nature as found in every individual.

The second essential element in the concept of education is *deliberate purpose*. The term *education*, as generally used, indicates no chance happening, but a purposeful process. No doubt our dispositions are modified by a great many forces that exist for all manner of purposes that are not specifically included in the accepted sense of the term *education*. Those extraneous forces referred to in Mill's definition—soil, climate, etc.—should not, for example, be included in the concept of education; and yet the very fact that a careful writer like him does introduce them, though tentatively, suggests that they have at least a claim to be considered. So strong is the feeling that such apparently adventitious forces have an educational effect that a name has been suggested for this informal type of education. When Henry Adams, in his well-known account of his own education, deals with formal education, he has little good to say of it. On most occasions when he finds that education has done him some good he calls it "accidental." A better term is used by Professor David Snedden of Columbia University. The kind of education we get by the mere process of living, the "licking into shape" that we get by our intercourse with others who have no thought of educating us in any way, he calls "by-education."

If into this apparently chance education there be introduced any element of purpose, however remote, a new name is necessary. If, for example, we accept the idea that behind all this apparently haphazard experience that licks us into some sort of shape there is assumed to be some world spirit, some directing influence—if you please, God—we find the demands of the concept of education satisfied, since the idea of deliberate purpose is admitted. Still, the purpose is so indefinite and so far removed from the ordinary course of life that it may be worth while marking off this

form of education in a class by itself, under some such name as "Cosmic Education."

The third of the essential qualities included under the concept education is that it always implies the use of an instrument. There must be some means by which the deliberate modification of the educand may be accomplished. This instrument is not far to seek. The very fact that in the popular mind teaching and education are regarded as all but synonymous at once suggests that this instrument must be knowledge. Teaching is very commonly understood to mean little more than the communication of knowledge. So markedly is this the case that a sort of knowledge fetish has been set up. As one goes to an ironmonger's for hardware, to a fishmonger's for fish, and to a cheesemonger's for cheese, so we naturally turn to the school for knowledge. It is often regarded as a knowledge-store, and the teacher as a knowledge-monger. But while this mechanical view is entirely wrong, it quite correctly suggests the fundamental importance of knowledge in education.

In the theory of education, knowledge has two values: its intrinsic value and its value as a training. Taking the intrinsic value, we have again two values: knowledge has an intrinsic value determined by the power it gives us over Nature and the outer world. This is what is often called "useful knowledge," and includes a great many of the facts of science. But there is another kind of knowledge that has no practical use in itself, but human society makes it valuable, gives it, in fact, a "sort of" intrinsic value. The facts of heraldry and many of the conventions of society are not in themselves valuable, but social custom makes them so. The distinction is not vital, though it has a certain educational importance, as Herbert Spencer brings out in his little book entitled *Education*.

One way in which the aim of education may be effectively expressed is by saying that it has to prepare

the educand to make himself at home in his environment. Dr. E. C. Moore, in fact, says that the process of education consists in so modifying the environment that the educand will inevitably adopt the right attitude towards it. Another educational writer, Dr. Thomas Davidson, in a well-known lecture, dealt with "Education as World-Building," by which he meant that education consists in building up an inner world that fits into the outer world. It is not to be assumed that this inner world is a replica of the outer. It is not a picture or a model of the outer world, but merely a world of potentialities, a world of tendencies, a world of possibilities of behaving reasonably in all the situations that are continually recurring in what is called real life. This world is built up by means of supplying appropriate experiences to the educand. It is the function of the school, in fact, to supply experiences of just the right kind to give the educand facility in dealing with the situations of life. In his *Principles of Education*, Professor Franklin Jones tells us that unless the school can supply experience in a more organised and intensive form than can be had anywhere else, there is no justification for its existence. For it is evident that the ordinary process of living will result in the building up of an inner world that will enable the young person to get along sufficiently well in his surroundings. Where the school has the advantage is that it can select and organise the significant facts in the order of their importance in time and space, and thus save much time and many unpleasant, not to say dangerous, experiences that would be otherwise inevitable.

But there is another way in which knowledge may be used as an educational organon or instrument. Apart from its intrinsic value, knowledge may play an important part in the educative process by serving as a sort of grindstone on which the wits of the educand may be sharpened. There is much discussion about the

relative values of the various school subjects as trainers of the mind, but all admit that, while the values differ, every subject has *some* value in the training of the mind.

To these three essential elements included in the concept education a fourth may be doubtfully added. This is the element of time. While education may be said to be carried on from the cradle to the grave, it cannot be denied that in ordinary use the educand is regarded as a *young* person. There is, in fact, a certain range within which education may be naturally carried on. What may be called the span of education has varied at different times in the history of the world, and at any period it varies in different countries according to their stage of development. There has been a tendency of late years to increase the span of education, accompanied by a reaction against this increase. It is because of the activity of these opposing tendencies that the suggestion is made that the time element should be included as an essential in the concept of education.

Rousseau tells us that education begins with the first breath the infant draws. Froebel would throw it back to the Annunciation; while, if the eugenists had their way, they would throw it back countless ages. But while cosmic education or by-education may be started at these remote periods, formal education is not usually begun at an earlier period than the infant school age. Comparing the beginning ages for entering school as stated in the official returns from the various civilised countries of the world, we get between six and seven as a very common age, though of late, with the coming of nursery schools and other preliminary institutions, the beginning age has gone down. At the upper range eighteen is a very common limit for secondary school work. Twelve to fourteen is a usual termination of what has been hitherto known as the elementary stage.

What interests us mainly is that at the highest stage of all there does seem to be need for a limit. Twenty-four appears to represent a very common finishing age, and there seems to be a rather general agreement that beyond that stage the law of diminishing returns applies to such an extent that economic and educational considerations both suggest the advisability of drawing the line there. No doubt practice has had more to do than theory with the present span of education. When Plato gets his hand in, the range is greatly extended. Thirty-five years of age, and even fifty, mark stages in his educational scheme. But these advanced ages concern only the élite of his state, and can hardly be quoted in connection with education as a whole. There is, however, now so much discussion of the age limits of education that it seems justifiable to include a reference to age in the general definition towards which we are working.

Keeping in view all that has gone before, and realising the limitations under which the educator labours, we may adopt as a working definition of education: The process of deliberately guiding the development of young persons by the communication and manipulation of knowledge.

In order to get a grip of our subject—educational theory—we had to reach some sort of definition of education. In order to reach that definition we had to theorise all along the line. The inevitability of making assumptions in our subject is all too obvious, and the necessary acknowledgments will be made in their proper place. In the meantime we are concerned with the nature of theory with special reference to education. Theory originally meant looking on intelligently, contemplating, examining critically—and so it went on to represent the rational view of a practical subject. Theory is generally accepted as meaning the thinking out or planning something, and practice as the putting of thoughts or plans into operation. Teachers who

## EDUCATIONAL THEORY. 19

contemptuously proclaim that they have no use for theory do not mean exactly what they say. When asked why they do certain things in the way they do, they are ready enough with an explanation. This, though they are unwilling to admit it, is really their theory; but since it is plain and sensible, they do not recognise it *as* theory.

It is because they have nothing but theory that directors of education and amateurs who write about education are looked at askance by many professional teachers. A name is needed for those who are professionally connected with education, but are not actual teachers, a name that will also include those who make a study of education even though they take no active share in educational work. The word *educationist* offers itself, and is probably preferable to the longer form *educationalist*, though both are current. The word is, perhaps, better reserved for those who make a study of educational theory, whether they are professionally engaged in educational work of a practical kind or not. Many of the administrative officers in education departments are not entitled to be called educationists, and, to do them justice, many of them make no claim to the title. But, on the other hand, many of them are. The same might apply in a less degree to teachers. Most of them take enough interest in the theory of education to warrant them in claiming to be, not only teachers, but educationists, though a minority are content to call themselves merely teachers and leave it at that. For our purposes it will be convenient to keep the term *educationist* for those who are given to the study of education, while the term *educator* is generally reserved for practising teachers. Some educationists, however, have a just claim to be called educators, though they do no actual teaching, for we have seen that education includes a good deal more than actual instruction.

All teachers worthy of the name make some sort of



study of the theory of education, so all that we have to say in this little book is of direct interest to them. On the other hand, there are certain parts of this theory that concern only practising teachers. These include all the activities of the actual class-room. Everything connected with the methods of instruction belongs exclusively to the teachers, and in Chapter V., under the heading "Theories of Method," will be found a treatment of such matters. The educationist is not called upon to read a chapter of this kind, but the bigger problems of education are so pervasive that they have a direct influence on even the practical methodology of the class-room, and the educationist may find something of interest even on the plane of method. The same applies to the chapter on "Standards in Education," though here the educationist will probably find more congenial matter than in the Methods section.

The practical teacher, on the other hand, has no excuse for omitting any of the chapters. It is his business to make himself master of the whole range of education. The time has passed when the teacher can afford to be a mere craftsman; he cannot allow the intelligent outsiders, whom we have called educationists, to know more than he of the inner workings of the process to which he has devoted his life.

CHAPTER II  
*FOUNDATIONS OF EDUCATIONAL  
THEORY*

EVERY educational theory necessarily implies a more or less clearly defined view of the nature of things, in other words, a philosophy; and every philosophy makes at some point or another at least one—usually many more—assumption. We need not be surprised, therefore, to find in the definition of education suggested tentatively towards the end of Chapter I a big and fundamental assumption. It takes for granted the possibility of education. It assumes the educability of the educand. At first sight, it does not seem an unreasonable demand to ask the reader to admit that education is possible. The world is full of schools and colleges, and something called education is going on conspicuously within them. But theory, being a kind of philosophy, has no right to take anything for granted, without acknowledging that an assumption is being made. It is the business of theory to detect all assumptions in the material it uses, and to acknowledge them.

If every theory of education implies an underlying philosophy, it is obvious that no philosophy can satisfy the educational theorist unless it is consistent with this fundamental assumption of educability. Keeping this condition in view the educational theorist may profitably look into all the available philosophies to find which offers him the safest foundation.

If he be what is called a plain man, one unsophisticated in the ways of professional philosophers, he will find something attractive in the very name of one

School of Philosophy that has had its day. The Common-sense School certainly admits of the assumption that education is possible. It is well accustomed to take things for granted. This is, indeed, its strong suit. It claims emphatically to be the philosophy of things as they are; though its critics are inclined to say that it is the philosophy of things as they appear. It is sometimes called the Scotch School, so we may be prepared to find it working along very cautious lines. It certainly raises no unnecessary difficulties for the educational theorist. There is the educator and there is the educand: they are free to react upon one another in a stable outside world that obeys its own well-established laws, and in which things are what they seem. In so far as the educator masters these laws and makes himself familiar with human nature—both junior and senior—everything is in order. All he has to do is to go in and educate. So long as the educator keeps to the plane of mere teaching, little difficulty need arise, but as soon as he dips into theory at the higher level of education, he finds that the Common-sense School does not carry him far enough.

The seeker after a philosophical basis for educational theory does not fare much better when he turns to determinism. Here he finds himself faced with a universe that is a huge system of causes and effects that make an endless chain through which no educator can break. So huge is the system, however, that there seems to be room for the interaction between educator and educand without loss of freedom on either side. But most educationists have an uneasy feeling that there is not much to be gained by theorising under a scheme that leaves no initiative for any of the elements of a vast mechanism, in the working of which each step is determined beforehand by immutable laws.

Yet some theorists feel so oppressed by the difficulties in dealing with that mysterious entity, con-

sciousness, that they find relief even in determinism. They cannot explain consciousness, and complain that they cannot even observe it. All that comes within their purview is the way in which human beings behave. This behaviour may be the result of conscious processes, but all that the observer can be sure of is the behaviour itself. Accordingly, these theorists call themselves behaviourists, and work within their sphere of experience by studying the behaviour of the educands, and by basing their practice on whatever conclusions they can draw from their observation. The doctrine is getting quite a considerable following, since it frees the theorist from grappling with the ultimate problem of freedom, and yet leaves him at liberty to carry on his work on a high intellectual level.

There is something attractive in a certain view of humanity that can hardly be technically called a philosophy, but has strong affinities with determinism. It is often called the mechanistic view, and may be best presented as the scheme that treats man as a machine.

In the eighteenth century, La Mettrie published a tiny book called *Man the Plant*, which did no harm, for after all a plant is an organism, and the parallel between man the plant and man the animal led to no contradiction. But when La Mettrie followed up the plant booklet by a bigger work called *Man the Machine*, trouble arose among the educationists. For if man is a machine he is beyond the reach of any educator. Certainly La Mettrie is generous, if not quite consistent, in his concessions. Man is a machine, no doubt, but he belongs to that kind of machine that winds itself up, in which case he comes to some extent within the range of the outside educator, who may be assumed to be permitted to take a hand now and then in the winding up. The trouble is that if the human machine can wind itself up it ceases to be a machine in the proper sense of that word, and

accordingly La Mettrie has no status in educational theory. He cannot have it both ways. Either man is a real machine, in which case he lies entirely outside the educator's influence, or he comes under that influence, in which case he is not a machine.

It is interesting to note how often theorists claim to regard man as a machine, and yet treat him as a fit subject for education. They do not seem to realise that they put themselves out of court in educational discussion by depriving the educand of a soul, or its equivalent. Mark Twain, for example, in a curious but intensely interesting excursus into the realm of psychology, published a book, after a quarter of a century of deliberation on the subject, under the title of *What is Man?* The answer to his own question is given in the phrase in the text: "Man the machine" who, he tells us, "is moved, directed, *commanded* by external influences *solely*. He originates nothing, not even a thought." This state of affairs, as Mark tells us elsewhere, "is very offensive." But, however disagreeable to Mark, this outside domination is not objectionable to the educator, who, it will be noticed, is one of the outside influences. Still, Mark is not discouraged by the machine status to which he has reduced man, and goes about his educative work just as if the machine-man had a soul. If a writer extracts man's soul, the least he can do afterwards is to leave the soulless machine in peace. But this is not the way of the mechanist philosophers. They all want to preach to their soulless victims. Mark Twain, for example, in this book of his, produces an *admonition* that he likes so much that he prints it in two different parts of his text. It is an excellent admonition, if only it had been addressed to anyone with a soul: applied to a machine, it is just a little out of place.

Mr. Arnold Bennett is in a little better case, for, at the expense of consistency, he earns the right to do his preaching. In his little book, *The Human Machine*,

he allows man to have an ego, which, of course, involves a contradiction of the title of his book, but at any rate justifies the sermon that he administers to his human machine. Even so clear a thinker as T. H. Huxley falls into the preaching habit when dealing with human beings, whom he has practically reduced to automata. The dramatist Karl Capek, in his *Rossum's Universal Robots*, at least avoids this error. His Robots are men machines that are interesting to the general public and instructive material for broad-minded psychologists, and they are entirely sermon free.

It is this urge of the educationist to preach—that is, to practise the craft about which he theorises, that makes him doubtful about determinism, in spite of its attraction in other directions. So it is not wonderful that he seizes on any opportunity that may enable him to combine the definiteness of determinism with the freedom of initiative that he feels to be essential in the process of education. Accordingly, the loophole offered by Henri Bergson is welcomed by some of the educational theorists. The claims of determinism are so strong that this philosopher practically accepts them for the universe at large, but saves his philosophical conscience by making an exception to the deterministic basis on which he is willing to build up his view of the universe. Living creatures, he is glad to admit, are “centres of indeterminism.” This is quite sufficient for the educationist, for it makes room for the educable educand. Determinism may hold all the rest of the universe in thrall so far as the educational theorist cares, so long as human beings are left their freedom.

But, after all, Bergson's concession is an assumption, and, if we are going to make assumptions anyway, it may be possible to get a less arbitrary one. Accordingly, a large number of educationists turn to the various forms of idealism. Without doubt the

whole of this school of philosophy is based on a big assumption. But the representatives of idealism acknowledge the assumption to be an assumption, and a big one at that.

This assumption is that the universe is rational. Critics smile grimly when they hear this, and point to the many apparently irrational things to be observed in this universe of ours. For the assumption implies—and the idealist philosophers assent—that whatever is actual is rational, and whatever is rational is actual. But the idealists do not claim that whatever is rational is actual at any given moment. They do maintain, however, that what is rational either is or will be actual. For this is no otiose philosophy that would lead the thinker to rest content with the state of things at present existing, however evil that state may be. The idealist realises as well as another that evils exist, and this realisation is accompanied by indignation at the evils and a firm determination to get rid of them. The taunt that the idealistic attitude really admits that "whatever is, is right," may be met by the contention that whatever *is* at any moment includes not only the evils of that moment but the philosopher's appreciation of those evils, and his full purpose of and endeavour after their removal.

Being by hypothesis rational, the whole universe is working towards a rational goal in a rational way. If this fundamental assumption is denied, there seems to be no good end to be served by continuing the discussion. Why reason about anything in a universe which is not admitted to be run on a rational basis? It is idle to call upon the idealist philosopher to *prove* his contention, for he and his fellows all form part of this great organic whole that we call the universe, and cannot get outside of it in order to envisage it, and demonstrate its rationality. We can no more get outside the universe than we can stand upon our own shoulders.

## FOUNDATIONS OF THEORY. 27

Underlying all the educational applications of the idealist position is the idea of organism as applied to the educand. This implies the working together of forces in such a way as to lead to the development of an entity towards a definite end, that end being determined by the nature of the organism. The notion of development is included in the concept *organism*. Growth is mere increase in bulk, but development means the working towards an end, that end being determined by the nature of the organism, and the process of attaining it being determined by the laws of the organism's nature.

But even if we are granted the rationality of the universe, and the nature of organism and development, we are far from free in the working out of an educational theory. Assuming that educator and educand are alike organisms, that they must develop according to the laws of their own nature, and that any interference from without must necessarily result in a stunted product, we do not seem to have much room left for the educator. Froebel, who heartily accepts the idealistic position, tells us in his *Education of Man* that the child naturally and inevitably chooses that which is best for his own development, just as a swallow on the wing selects the exact level at which to catch its prey. If this be true, what place is left for the educator? Surely his occupation is gone.

Froebel's solution is botanical. A plant must develop according to the laws of its own nature, and yet there is room for a gardener. An acorn can develop into nothing but an oak, but the tree cultivator has a great deal to do with the sort of oak that results. Even when a stunted abortion of an oak is the end of the process of development, that result has been brought about by the acorn's following the laws of its own nature. Those inhuman creatures who, in the Middle Ages, produced comical abortions for the sport of courts by compressing children's heads into fantastic shapes, did



their nefarious work by applying the laws of the children's nature. The lesson for the educator is obvious. Like these abortionists he must utilise the laws according to which the child develops, but towards a good end instead of a bad one.

Why, then, the suspicion of the educator that we find so common among critical laymen? If he is only doing for the child what the cultivator does for the sapling, why not treat him with good will, and bid him god-speed in his work? The answer appears to be that the more thoughtful among laymen are afraid of the sacred individuality of the child. Many people share the suspicion of Blake, who thanked God that he never was sent to school to be flogged into following the style of a fool. They do not fall back on the laws of the child's own nature, but express a vague distrust of the educator's influence. The cause of this suspicion may be traced to a certain unintelligent misunderstanding of the relation between educator and educand in the process of education.

The child is set on a moral pedestal, and poets and moralists busy themselves in proclaiming his virtues. We are told that he comes from heaven, which is his home: that he brings trailing clouds of glory in his wake: that he passes with gradually dimming splendour through the stages of boyhood and youth till he reaches the light of common day as a fully developed man. More or less unconsciously the blame for the disappearance of this glory is laid at the educator's door, and it must be admitted that, after all, he is responsible for just the period during which the trailing clouds disappear.

The whole attitude is wrong. An element of antagonism is introduced where it is out of place. Because the child comes from heaven there is a suggestion that the educator comes from another quarter. It is forgotten that he, too, had a cloud-trailing period. It is not realised that he, too, is an

organism, that educand and educator alike form parts of the wider organism of the universe, and that their interaction upon one another is merely the ordinary reconciliation of opposites in a higher organic unity. If there is a conflict between the two personalities, it does not by any means follow that the educand is the one to be subordinated or to go under. In point of fact, the educator, in order to attain his ends, must study carefully the nature and peculiarities of the educand, and must adapt his processes to meet the needs of the educand. Educators have to stoop to conquer. But in the last resort, and taking all things into account, there is no more subjection on the part of the educator than on the part of the educand. Each is working out his salvation in his own way. Each is realising himself, in a thoroughly wholesome way, that can be fully understood only when viewed from the point of view of eternity.

At this stage we are brought face to face with what is probably the highest form in which the goal of education can be presented. *Self-realisation* implies the making the best of oneself; bringing out of oneself the best of which one is capable. Sometimes the same ideal is represented by the term *self-expression*, but this term is not quite so satisfactory. For it implies the existence of a self already made, and ordinary experience shows us that ready-made things are not quite so good as things made to order. A ready-made self is not so attractive as one in the process of making. Further, mere self-expression does not even hint at further development. Self-realisation suggests a goal: self-expression does not. The notion of the ideal underlies the concept of self-realisation. Further, it includes the notion of subordination of self to secure higher development for that self. Self-expression comes parlously near what is commonly known as *self-assertion*. There are occasions in life when self-assertion is a virtue, but there are more when it is not. In any case, self-asser-

tion does not suggest any form of self-abnegation or subordination of the self, whereas in self-realisation there is often an imperative call to subordinate the self in certain directions in order ultimately to raise it to higher levels. Thus in religious connections it is not unusual to hear such expressions as "and in Thy service find perfect freedom."

The truth is that the only way in which self-expression can rank on equal terms with self-realisation is when it is regarded as a stage towards self-realisation. It has to be admitted that in order to realise the self we must be continually exercising it. From this standpoint self-expression is a means towards self-realisation. Indeed, when theorists are challenged for adopting self-expression as their goal, they reply, reasonably enough, that they mean the same thing by this term as others mean by self-realisation. This may be readily granted, but it cannot be denied that self-realisation is the more comprehensive term, and, therefore, on the whole preferable.

Limits of space prevent further reference here to other systems of philosophy that may have a share in determining the development of educational theory. Most of the theorists may be allocated to one or other of the systems referred to above, though, of course, there are some erratic writers who do not fit in perfectly anywhere. Herbart, for example, has had his philosophical position determined by his educational views, rather than the other way round. He denies that he is a materialist, so the best we can do for him is to class him under the heading of *atomistic*, as this is the aspect of his philosophy that enables him to make such an effective educational presentation.

There are some ingenious educational theorists that cannot be placed in any recognised philosophical category, and yet have had some influence on the educational thought of their time. Such was Rudolph Steiner, who, by an elaborate system of symbolism,

## FOUNDATIONS OF THEORY 31

15

created quite a stir in educational circles of the more impressionable type of theorists.

It has to be noted that, though every educational system has a philosophy behind it, there is no reason why each theorist must be classified as belonging to one recognised philosophical school. Naturally, there is a strong tendency to eclecticism, each theorist taking from different schools of philosophy what he finds suits his purpose. Accordingly, in the next chapter the basis of classification will be educational rather than philosophical.

CHAPTER III  
*CLASSIFICATION OF EDUCATIONAL  
THEORISTS*

WHEN education as such began to be recognised as a separate study in connection with the training of teachers, and afterwards as a subject in University curricula, it was only natural that lecturers on education should look out through world-literature for great names wherewith to adorn their lists of prescribed reading. Quite naturally Socrates, Plato, and Aristotle were seized upon at the very start, and a good deal of ingenuity was shown in bringing out educational principles from their work, oral and written. Plato's *Republic*, no doubt, was begun as a treatise on government, but when finished it could be not unfairly claimed as really a text on education. While Aristotle has no one volume that can be treated in this way, there are passages in the *Ethics*, the *Politics*, and even the *Poetics* that may be legitimately appropriated by the educational theorist. So with Quintilian; though his book, *Concerning the Orator*, was written with regard to one profession, there is a great deal in the text that is of importance to educators. It was only to be expected that all the way down the ages great writers should have been called upon to pay toll to the historian of educational theorists. Even at the present day one of the best ways for a young lecturer on education to establish his claims as an educationist, is to select some well-known writer and publish a book under the title "So-and-So as Educator." Thus we have articles or books on *Hegel as Educator*, *Browning as Educator*, *Wordsworth as Educator*, *Kant as Educator*, and even *Dickens as*

## CLASSIFICATION OF THEORISTS 33

*Educator*, little as that novelist sympathised with the schoolmaster attitude.

Anyone taking a wide view of educational theory and proposing to write on the subject will naturally seek for some basis of classification to enable him to arrange his matter in a fairly systematic way. The earliest writers were inclined to select the obvious basis of the chronological order in which the theories appeared. Unfortunately these theories did not come to light in that orderly fashion that writers with tidy minds desire. Accordingly, in the earlier works there is a struggle between chronology and logic in presentation, and often there is a great deal of ingenuity expended in trying to reconcile different bases of classification.

After a preliminary period of experimentation in presentation, in which Dr. Henry Barnard did important work in the collection of material, we reach the point at which R. H. Quick produced his *Essays on Educational Reformers* that marked the beginning of a new stage in the development of the subject. Himself a schoolmaster, with an intense interest in the theory and practice of his craft, Quick was not content to be a mere chronicler, so he let himself go along the lines of his own interest, the result being probably the best book of its kind ever produced. The influence of the work may be estimated by the fact that, for long after its appearance, people seldom spoke of educational theorists, but of educational *reformers*.

Oscar Browning's *Educational Theories* is a slight work, but was not without its effect in directing the discussions on classification. Certain descriptive technical terms were in general use in his time, and he did something to clarify their meaning, and limit their application. He makes a good point when he starts with the following description of what he considers the three most important types of educational

## 34 EDUCATIONAL THEORIES

theorists: "(1) Those who wish to educate through the study of the Classics; (2) those who wish to educate through the study of Nature; (3) those who aim at an education independent of study and knowledge, and think rather of the training of character and the attaining of the Greek ideal, the man beautiful and good." These three classes correspond in a general way to the three descriptive terms that supply the basis of the earlier classification of educational theorists: the humanists, the realists and the naturalists. The terms are still used in educational discussions, so it is worth while examining what underlies each.

Humanism no doubt has a definite reference to the Classics, but is not by any means confined to these subjects. It is the spirit of humanism that counts, and it may be cultivated as well on other matters as on Latin and Greek. In fact, these languages can be taught and studied in a spirit that is starkly un-humanist. There always has been humanism in the world, and always will be, but without doubt the period at which humanism is generally regarded as having reached its highest level coincided with the zenith of the Renaissance. At that time Latin and Greek were valued both for their form and for their content. Their value as language was fully recognised, but attention was not limited to the linguistic side. Men valued Latin and Greek because they brought moderns into touch with the riches of classical thought. By and by the beauty of the instrument began to subtend too big an angle in the minds of those who used it. Scholarship took a narrower, more technical form, and humanism gradually degenerated into pedantry, though, as a tool of education, the classical languages still retained a value, and in the hands of skilful and sympathetic teachers they always form admirable teaching material. All the same, those classical teachers are wise who base their claim for

their favourite studies to some extent on the merits of the languages, but in the main on the history of Europe for the past twenty-four centuries. The value of the Classics is still mainly humanist.

Humanism in education to-day is no longer limited to the Classics. Any subject that is taught in its bearings on the broader human interests is now ranked as humanist. What is usually called a liberal education has nearly always a strong humanist bias. The liberal arts are generally regarded as those that are worthy of the attention of a free man, arts that are not necessarily useful in the economic sense. Sometimes, indeed, the liberal arts, and particularly the Classics, have been defended on the ground of their uselessness. In this view they are valuable in meeting the spiritual and æsthetic needs of man. So far as these studies meet these needs they serve their purpose, whether they are useful or not, in the popular sense of that term. We are familiar with the story of the humanist mathematician who finished up an account to his friends of a delightfully attractive theorem he had just evolved with the enthusiastic flourish: "And, gentlemen, thank God no use can be made of it." What these humanists really admire is not the uselessness of their results, but their disinterestedness. A study is to be estimated not by what it enables the student to accomplish on the utilitarian side of life, but by its effects on the person who studies it. Because a subject can be applied to useful practical ends, however, it need not lose its culture value. No doubt those who try to make out a case for the culture value of stenography and type-writing have a hard task before them; but it is not a hopeless one, if only they will be content with moderate claims compared with those of the recognised humanist subjects.

In view of all this, it will be seen that it is an insufficient description of *realism* to say that it con-



sists in educating by a study of the works of nature. Still further wrong are those who believe that humanism deals with words while realism deals with things. "Things, not words," has been used as the slogan of the realists. But, on the one hand, true humanism prides itself on dealing with the finest *thought* in the most fitting words, with matter as well as with expression, and, on the other, realism stakes its reputation on being able to describe with accuracy the facts of what is somewhat loosely called real life. When we are told that a science is but a well-made language, we cannot be sure whether it is a humanist or a realist that is speaking. It is true that the very word *real* suggests something tangible. The Germans find it useful to have a plural word to indicate actual things as opposed to mere thoughts. What is represented by their word *Realien* might form the greater part of the data of Geology, yet would make but a poor show in Metaphysics. On the other hand, words would prove a prominent feature in both.

According to the attention paid to words, there may be different kinds of realists: so we need not be surprised when certain qualifying words are attached to the term. *Verbal realist* is obviously an appropriate term to apply to those who give words a prominent place in their scheme. *Sense realist* is the term applied to those who emphasise the part the senses play in the building up of the inner world. Locke, for example, is often called a sense realist. Comenius is frequently referred to this class, though it seems more natural to call him a verbal realist, since the main feature of his scheme of instruction is the correlation of words and *Realien*. His *Orbis Pictus*, the famous textbook in which actual objects are represented by pictures, beside which are printed the corresponding Latin words, may be used to justify the term *sense realist*, since it certainly appeals to the senses: but on the other hand it is obvious that the

## CLASSIFICATION OF THEORISTS 37

pictures are used with the very definite purpose of inculcating the names of the objects. Many of his other books are collections of classified words, and clearly support the application of the adjective *verbal* to his brand of realism.

We have seen that according to one writer the naturalists form a group of educationists who do not depend on study at all, whether of things or of words, but give their attention to the training of character in the process of living. It was suggested that the Greek ideal of the good and beautiful man was of the essence of naturalism. But a much wider view is now necessary if we are to make room for the many new claimants for a place under the heading "Naturalists."

We cannot do better than take up one who is perhaps the most prominent naturalist who ever wrote on education, and work our way from him outwards to include all the groups that have a right to the name. When he was young, Jean Jacques Rousseau wrote a competitive essay on the general problem of whether civilisation had improved or degraded humanity. With his congenital tendency to say the opposite of the natural and the obvious, he took the view that civilisation was a mistake. This gained him the prize, but set on foot an educational theory that cost educational writers a great deal of trouble to keep in its proper place. Rousseau in his great educational work (called *Emile*, from the name of the boy-educand round whom it is written) begins with the statement that everything is good as it comes from the hands of the Creator, but at once begins to deteriorate in the hands of man. Civilisation is a blunder, and our only hope of salvation lies in retracing our steps. "Back to Nature" is the slogan of Rousseau's educational theory. The noble savage is set up for our admiration, and his somewhat pronounced defects are conveniently ignored.

## 38 EDUCATIONAL THEORIES

What separates this noble child of Nature from the degraded men of civilisation is clearly education. One would think that in that case the natural preventive of decay would be the abolition of education. But such a course would have interfered with the publication of this grand work on education, so a middle line had to be followed. Education of some kind had to be dealt with, so Rousseau hit upon his plan of negative education, of which the main principle is to lose time wisely. Since ordinary education is bad, and leads to deplorable results, and since there must be an educator in order that there should be a discussion at all, it was obviously necessary to keep this educator out of mischief by limiting him to the negative work of preventing the damage he would necessarily do if he were allowed to undertake positive work. Leaving this Rousselian tutor to the dull work that his creator's genius contrives to make interesting to the reader, let us consider the naturalism on which the *Emile* is built.

If man must be led back to Nature, it is obviously assumed that man is not himself natural. When left to himself, the implication is that he will inevitably go wrong. Unlike sparks, he has no tendency to fly upwards. His bias is in the other direction, and, if Rousseau is to be believed, the efforts of the external educator are likely to accelerate the downward progress.

All this opposition set up between Nature with a capital letter, and plain human nature, is unwholesome, and is based on the sentimental attitude that we have seen to be favoured by the poets. When Cowper tells us, for example, that

“ God made the country, but man made the town,”

we have an opposition introduced that is not warranted. If God did make the country, He also made

## CLASSIFICATION OF THEORISTS 39

man, and is, therefore, indirectly responsible for both town and country. The town-versus-country attitude represents a poetic whim rather than a philosophic attitude. There are those who think in a vague way that a peasant's smock is more natural than a stock-broker's frock-coat.

The practical point for the educator is to find what Nature wills, and do that. This indeed is what an educational writer has done whom we have already encountered in another connection. John Amos Comenius we have found labelled a realist of some sort, probably of the verbal variety. But whatever else he is, Comenius is certainly a naturalist. In his great work the *Didactica Magna*, he is continually appealing to Nature, and calling upon the educator to follow her. Nature does not proceed by leaps: neither must the educator. Nature always does things at the seasonable time: so must the educator. The book is full of such parallels, and the applications are always apt, if a little far-fetched.

What is somewhat crudely applied in Comenius is the same sort of principle that we find in the philosophical system that adopts the name of Naturalism. In educational theory the term *naturalist* is usually applied to those who follow the big laws that govern the great universe, and among these laws those of human nature are included. For it is not fair to pick and choose among the laws that we are going to regard as natural. If we are to make a selection of laws, we must at least let it be known on what basis we are to proceed. When Pope tells us that

"We are but parts of one stupendous whole,  
Whose body Nature is, and God the soul,"

he suggests a more wholesome view of Nature, though he introduces a new source of disturbance of the unity of the whole by a sort of antithesis between Nature

and God. When we are urged to follow Nature, what is usually meant is that we should study this stupendous whole, analyse out the fundamental principles underlying its working so far as that is possible, and base our educational activities on what we there discover. In short, the plan of the naturalist in education is, in the Scots phrase, to "get as far ben wi' God" as circumstances and our nature will admit. It is curious that our examination of Naturalism in education should lead to the notion of the World Spirit manifesting itself in the world, since on the religious side Naturalism is the name given to the attitude that eliminates all notion of the supernatural. The meaning of Nature is the essential point in our present discussion, and according to our decision on this matter will our educational theory become optimistic or pessimistic.

In medieval times Naturalism was used to indicate the lower estimate of human nature that laid stress on the fleshly lusts and grosser aims that were set over against the idealism and romance of chivalry. So in the Bible "the natural man" is used in a way that might have given Rousseau pause in his admiration of the noble savage. This natural man corresponds to "the beast" that Tennyson urges us to "work out" in our progress towards higher things. If we are to be true to our assumption of the rationality of the universe and to self-realisation as the ultimate aim of education, we must interpret Naturalism as referring to the better nature, not the worse. The nature that we have to follow is the potential, though not yet realised, state at which all the elements of the universe attain their fullest and finest development. It may be objected that this ideal is unattainable, and therefore outside the pale of practical education. But it is of the essence of the ideal that it should be unattainable. There would not be the incessant quotation of Browning's couplet,

“ A man’s reach should exceed his grasp,  
Or what’s a heaven for?”

unless the implied theory had a firm foundation in the needs of human nature. A mere end or aim is good enough so far as it goes, and we have many witty quips on the folly of striving after the unattainable, but the stimulus supplied by the unreach-able goal is its own justification.

“ The joy lies in the doing,  
And the rapture of pursuing  
Is the prize.”

To the three standard groups of educational theorists boasting a definite and well-recognised name, there now falls to be added a fourth that is at least on its way to recognition.

With their well-known love of logical arrangement the French theorists have been scandalised by the lack of unity in educational systems. The spirit of Comte has been moving among them, and they are not satisfied with the present haphazard arrangements. They point out that education is a thing of shreds and patches. The pupils have no idea of what it is all about, and just go on from day to day doing their “ day’s darg,” and not troubling about what underlies it all. Nor can the boys be blamed, for it appears that the masters themselves do not trouble about these ultimate things, but do their daily teaching and rest content with that. As Ernest Lavissee graphically says : It is the case of “ a fragment of an educator addressing itself to a fragment of a pupil,” and he might well have added, “ about a fragment of a subject.” All this has roused the desire for some sort of unification of the process of education that will integrate all the elements into an intelligible whole. The ideal is excellent, and the general effect of Integral Instruction as a theory will be to quicken the consciences of

educators in the matter of organising their work. But the realisation of the idea of integration must be recognised to be at least remote. Only the most virulent optimism could extract hope from the following excerpt from Lavissee's essay on *An Education that Failed*: "We shall be educators on the day on which, each of us having before the mind the whole successive development of the pupil, we shall be all and each, so to speak, the same master, the perpetual master of that pupil." The essence of Integral Instruction thus resolves itself into an attempt to reduce all education in schools to an organic unity in which the whole teaching body shall act as an organic unit on each individual pupil.

While Integralism may be treated as an independent theory, because it has clearly marked founders and supporters, and can be referred to the influence of a recognised philosopher, there are a great many educational developments of theory that are exercising influence on thought and practice that yet do not offer sufficiently clear stigmata to enable the critic to cord them off into separate, clearly marked groups. Critical writers on educational theory are still glad to use the old terms so far as they go, but with the rapidly increasing complexity of the situation they are now falling back upon a more general form of treatment, and are inclined to deal with *tendencies* rather than with sharply marked-off schools of educational thought.

In this tendential treatment we at least get rid of the chronological complication. We may treat the same writer under several different headings according as his work exemplifies this or that tendency. To illustrate, take the *psychological* tendency. A favourite representative here is Locke, who is certainly at home in this group. But on the other hand, on the purely educational side, he is often rightly classed among the *disciplinarians* from his views on the values of cer-

tain subjects of the curriculum. It would be quite possible to place him also in groups connected with sociology and vocational work. On the other hand, an educationist like Herbart will be placed by many writers definitely in the psychological section and left there, though there will be found writers who would give him a place under several different tendencies. The elasticity thus made possible will be welcomed by all who have suffered under the rigid scheme that leads to interminable quarrels about what are really insignificant differences.

When we consider the *scientific* tendency we find a curious interplay of two tendencies within the big tendency. Some theorists are more interested in science as subject-matter to be taught in schools, others in the scientific attitude to be adopted in dealing with educational theory. Herbert Spencer belongs mainly to the first group, but has certain affiliations with the second. T. H. Huxley is still more closely restricted to the first group. The scientific tendency in educational theory is marked by a certain impatience among its exponents of the purely philosophical attitude adopted by others. Curiously enough, perhaps the most prominent among those representing the scientific tendency is a woman. Dr. Montessori in her writings is continually pointing out that her work is purely scientific, and she has little sympathy with those whose tendency is purely philosophical. G. Stanley Hall was one of the earliest to adopt the scientific attitude, and though many of his conclusions are no longer accepted, his influence is still felt. The tendency at the moment is closely connected with all the quantitative and experimental work that is being done. Perhaps the best representative of the scientific tendency in both aspects is Professor T. Percy Nunn, whose book on *Education: its Data and First Principles*, is the most authoritative presentation on this aspect of our subject.



## 44 EDUCATIONAL THEORIES

The sociological tendency is very marked at the present time, particularly in the United States. Education naturally always had a sociological bias; indeed, it is of its very nature concerned with social phenomena of all kinds. It might almost claim to be the first practical form that sociology took in its own development. Of late years the social conscience has been so stirred that there has been a vigorous re-percussion on educational theory. Dr. John Dewey is the most prominent writer on this tendency. His philosophy lends itself very naturally to this aspect of education, and his own experience in connection with the training of teachers has given him an excellent background against which to project his theories. His work on *School and Society*, along with the magazine with the same title, makes an excellent presentation of the working of this tendency. No doubt it has rather a leaning towards the by-educational. Its exponents are inclined so to arrange matters that education may be insinuated rather than imposed. When the subject-matter is deliberately treated, there is a natural bias towards citizenship and service. So different is this tendency from any of the others that it naturally introduces from different angles the problem of collectivism in education, which needs the separate treatment which it will receive in our last chapter.

CHAPTER IV  
*STANDARDS IN EDUCATION*

THE trouble experienced in classifying educational theories results from the general lack of organisation in the study of education as such. The subject forms, indeed, a happy hunting-ground for more or less irresponsible critics. People will talk freely about education who show a commendable diffidence in expressing opinions on matters generally recognised as scientific or philosophical. Up till recently there has been a lack of mystery about education: it formed a sort of no-man's-land where opinion was rampant and authoritative doctrine hard to find. A well-known professor of education used to give to his class at intervals the exercise of selecting ten educational principles from recognised authorities, one principle from each authority. This useful exercise was usually well done, but the trouble began with the sequel. This consisted in requiring the students to produce from the works of other educational authorities a contradiction of each of the ten principles they had previously supplied. The interesting thing is that the second exercise did not prove nearly so formidable as both professor and students had expected—so general is the difference of opinion among educational authorities. Occasionally, indeed, a principle would turn out to be so hopelessly sound that no contradiction could be found: but in most cases contradictions bristled to the student's hand.

One lesson learned from the exercise was that a great many of the contradictions were more apparent than real. Examination often showed that, when actually confronted, the contradictory statements could

be honestly reconciled by reference to some higher principle. Often the contradictory statements were taken from different parts of the subject, each statement having a justification in its context, and being quite consistent with the principle to which it was opposed, if only both were taken together, and correlated under a wider principle.

But while all allowance must be made for such false appearance of contradiction, there were quite enough genuine inconsistencies to justify the suspicion with which educational theory has been long regarded. It is only natural that the presence of these real and apparent contradictions should convey to the general reader, to the plain man, and, indeed, to the professional educator, the impression that the subject of education is in a bad way, and has no stability. It is in the nature of things that striking contradictions should attract more attention than commonplace agreements. Yet there has grown up now a great body of accepted truths in education about which controversy has died down, and about which, therefore, there is no enthusiasm. It is worth noting that in the profession of education no use is made of a phrase that is current in law, in medicine, and even in divinity. This is "the books." Doctors and lawyers talk easily about "the books," by which they mean the recognised authorities on their subjects, authorities by which they feel more or less bound to stand. An appeal to "the books" is taken as all but final. It is true that at the advanced borders of their subjects there is an area within which discussion is still possible, and where changes may be effected. But the great body of doctrine is held to be established, and set up as an authority.

Educational theory is just reaching this state of stable equilibrium. There is now a great body of doctrine of such general acceptance that against it there is practically no appeal. Professor S. S. Laurie

was probably premature in calling his well-known treatise *Institutes of Education*. In his day there was hardly a sufficient body of generally accepted doctrine to warrant the dignified title. But to-day we are approaching, if we have not actually reached, the stage at which education may claim a modest place among the stable studies. When there are close on a dozen books in English alone under the uniform title of *Principles of Education*, it is obvious that there is no lack of material for professional study, and when we examine their contents we find such substantial agreement that some people are beginning to wonder whether separate books of this kind are required. No doubt a great many differences are recorded in the pages of these books, but there is growing up a uniformity even in the treatment of differences, which suggests in the most convincing way that there is somewhere a fundamental basis of agreement, if only we can reach it.

The first step towards this general agreement is naturally to get the problem stated in the clearest possible way. In this subject, as in so many others, lack of accurate terminology is one of the main causes of obscurity. It was long before there grew up a technical vocabulary sufficiently accurate to ward off arrogant outsiders on the one hand, and on the other, keep insiders within the path of more or less scientific procedure. So long as there were no mysteries in the profession, no arcana beyond the reach of the lay person, education was exposed to attacks and criticisms from the uninformed. Now, however, that the study is acquiring a respectable technical terminology, the layman is getting a little more diffident in his attitude towards educational theory. Education is gradually attaining an approach to something like scientific standing.

While outsiders are a little unwilling to grant this claim, those in the inner circle are not too anxious to

press it. For they realise that education belongs to that class of studies that can never reach the standard of "exact sciences." It is, indeed, doubtful whether it can ever reach the rank of a science at all. In his *Logic*, John Stuart Mill sketches out a science of character under the name of *Ethology*. Educationists have read this sketch with great interest, for they have seen what an admirable aid it would prove to education if only the sketch could be filled in and the science developed. Yet it has remained in its sketchy form, since it is based on those laws that Mill played with under the name of *empirical*. The question the educationist has to face is whether his subject can ever advance beyond laws that are empirical—that is, laws that are true in most cases, but not true in all. If education can never reach laws above the level of the empirical, it can never attain the rank of a science.

The common use of the phrase "educational theory" rather suggests that education does come under this limitation. Theory always carries with it the suggestion of doubt. So long as we speak of the *nebular theory*, for example, we suggest that it is on its trial. The same thing applies to the various theories in education that fill the textbooks. They are all under consideration, all tentative, many of them in the realm of opinion. We have seen that it is difficult to get principles of education that we can say without fear of contradiction are universally accepted. Even the principle that education is bi-polar is challenged by Sir J. E. Adamson, who holds that it is tri-polar.

In this state of doubt, the problem naturally arises: What is necessary in order that a subject should attain the rank of a science? Perhaps the best answer is—an objective standard. We have seen that at present the subject called education is dominated by opinion. Each writer approaches the matter from his own standpoint, and comes to conclusions that meet his own intellectual needs, but may not at all satisfy his

neighbour. Principles thus reached are called subjective, belonging, as they do, to the individual, but having no sanction beyond the experience of that individual. An objective standard, on the other hand, exists outside of, and independent of, any individual, and may be appealed to by anyone with the certainty that others will admit its authority. A science is a subject of study that has such a standard behind it. The study of Light, for example, is said to have become a science on the day that the laws of the refraction of light were discovered. Up to that time blue, red, and yellow were matters of individual opinion. They could not be accurately compared with what other people experienced. I could not intelligently compare my yellow with yours, because each of our yellows was a private matter, a subjective experience. When wave-lengths were discovered, and the spectrum became a uniform scale to which all could appeal, we had an objective standard, and Physics, so far as light was concerned at any rate, became a science.

The question naturally presses upon us: Can we hope for any similar discovery that will raise education to the scientific level? There are two lines along which hopes have been roused among educationists. One is the line of the brass instrument. The psychological laboratory has produced quite a number of such instruments that look promising. To be sure, they are only psychological, but psychology has become such a close ally of education that any discoveries she makes may be immediately applied to education. An approach to an objective standard may be claimed when such instruments as the following are in operation. The ergograph began life as a means of estimating the power of muscles, developed into a measurer of the amount of work an individual can do, and finally, resolved itself into a test of the amount of fatigue produced under certain conditions. The æsthesiometer is used to determine the range of touch

sensibility, and the tachistoscope to discover the speed of visual reaction.

Such instruments obviously suggest an approach to an objective standard in certain directions, and along with others are found in the educational laboratories that are now considered essential in a well-equipped education department in a University. More vague is the work of a suspicious instrument called an anthropometer, while more specific is the function of an instrument described in a recent number of the magazine *School and Society*, the purpose of which instrument is described as the "automatic teaching of drill material." Whatever encouragement such instruments may give to those in search of an objective standard in education, they are certainly a source of danger, since they introduce into educational discussion a mechanical atmosphere. Most educationists are convinced that not even teaching, much less education, can be carried on by a machine, other than a two-legged one. It is the fear of mechanising the teacher that makes educationists regard the brass instrument with suspicion, and leads them to seek elsewhere support for their claims to scientific standing.

The second line along which an objective standard may be sought is both less dangerous and more hopeful. In order to get away from the subjective standard to which we appear to be limited, we are invited to extend our range, and by taking a wide field try to get at results of a more general character. By increasing the number of cases considered, we may be able to rid ourselves of the restrictions imposed upon us by our limited personal experience. Though we are each confined to our own little island of consciousness, we may, by a process of interpretation, pass beyond its shores and get at truths out of our direct reach. In seeking to verify these truths, we may adopt quantitative methods, and thus set up a standard to which we and others may refer to our common satisfaction.

## STANDARDS IN EDUCATION 51

There is something insidiously attractive in this line of investigation, for human nature seems to have an inherent faith in figures and quantitative methods in general. It is true that we oscillate between the two maxims "figures cannot lie" and "figures can prove anything": but our general bias is towards the first. Once we can reduce a problem to a mathematical equation we feel that we are on safe ground. We are apt to forget that in the process of formulating our equation we have had to depend on our own ordinary individual powers, that, in fact, in seeking to attain our objective standard we have had to depend on our usual subjective one.

In any case, a formula has a very comforting effect on the mind of many educational theorists. In his textbook on psychology, Professor Titchener tells us that the psychology textbooks of the future will be as full of formulæ as are the physics textbooks of to-day: and it almost inevitably follows that textbooks on education will share in this increase in formulæ. There are, indeed, certain formulæ that have already established themselves in educational theory as likely to provide something not far removed from an objective standard. These are known as the Correlation formulæ. The more elaborate kind were introduced by Dr. Karl Pearson, but a simplified form has been invented by Professor Spearman, of University College, London, and is known as "Spearman's Foot-rule." These formulæ make it possible to compare various series of facts in such a way as to determine the degree of their causal relations to one another. For example, the problem of the relative training value of two subjects, say, mathematics and Latin, may be determined by the application of the Correlation formulæ.

It has to be admitted that the preparation of the formulæ for such purposes has to be done by people who are liable to the ordinary human weaknesses. In evaluating the results of



various examinations, the investigator has to depend upon his own personal judgment—that is, the ordinary subjective processes. Take, for example, one of the most promising of the formulæ, the familiar *Intelligence Quotient*, commonly known by its initials I.Q. Here we have a correlation between the age of the pupil and his mental development, so arranged that we are able to set up what appears to be an objective standard of intelligence. The ordinary age of the pupil is easily obtained, and is known as his chronological age to distinguish it from another complicated datum called his mental age, which is calculated in the following way :

A series of mental tests for each chronological age is prepared, and each of these tests counts for a definite period of time. There are six tests for each year between the ages of three and ten inclusive, and each of these tests counts for two months. For the age of twelve there are eight tests, each counting for three months. For the age of fourteen there are six tests, each of which counts for four months. There are six tests for ordinary adults, and six for superior adults, each of the first set counting for five months, and each of the second for six months. When the subject is tested, it is first ascertained for which year he can do all the tests, and he is then credited with that age to begin with. He has then added to his score the appropriate number of months for each test he has been able to meet successfully above the initial age with which he has been credited. The total of all these credits forms his mental age. Then by the simple process of making the mental age thus obtained the numerator and the subject's chronological age the denominator, we get a fraction that represents the subject's I.Q.

Suppose, for example, that a boy aged 11 years and 5 months could do all the tests for the age of 10, four of the tests for the age of 12, two of the tests for the

## STANDARDS IN EDUCATION 53

age of 14, and one of the tests for the average adult, his mental age would be made up as follows :

Full credit age	...	...	...	10 years
4 tests at 3 months	...	...	...	1 year
2 " 4 "	...	...	...	8 months
1 test at 5 "	...	...	...	5 "
Total				...
				12 years 1 month

This gives a total of 145 months for mental age, while his chronological age amounts to 137 months. In fraction form, this gives :

$$\frac{145 \text{ mental age}}{137 \text{ chronological age}}$$

In decimals the result would be represented by 1.05, but it is customary not to use the fractional form, but to take 100 as the standard. In this case the I.Q. would be 105, though 106 would be the still more usual form, for this is somewhat nearer the absolute value of the quotient than 105.

We have here a clear objective standard of mental capacity, if two assumptions are granted. First, the constancy of the result is assumed. We take it for granted that the I.Q. reached in this particular case will remain the same when we test the same person at, say, 14 years of age. On this point there is considerable doubt, though many competent observers are willing to stand for the constancy of the I.Q.

The second assumption is the one that interests us here. It is taken for granted that the test is accurate. But it is obvious that the fixing of the data on which the fraction is built is a purely subjective process. Let it be granted that all possible care has been taken in applying the tests, still there will always remain the

personal equation, the influence of the personality of the investigator applying the test. It cannot be denied, however, that we have here a much closer approach to an objective standard than in the days when the teacher's personal estimate of the pupil was all that was available. There are those, to be sure, who bluntly express their preference for the teacher's raw estimate as compared with the I.Q., and it is, no doubt, true that from certain points of view the personal estimate is preferable to the mathematical one. The moral aspect is beneath the notice of mathematics, and yet has a very high value. It is because of the neglect of this moral element (by which must not be understood merely the ethical) that we are often disappointed in the careers of people with high I.Q.s. The *Intelligence Quotient* has not yet been used by investigators long enough to supply sufficient data on which to base sweeping generalisations. But experience, even in the short existence of the I.Q. testing scheme, gives abundant evidence of the present unreliability of the I.Q. as an objective standard.

A still more deliberate feeling-after an objective standard is to be noted in the use of the various "scales" that have been invented for estimating progress in school subjects. While mental tests are mainly concerned with the estimate of the capacity or ability of the educands, the scales give attention to evaluating the attainments in school subjects. On the whole, mental tests emphasise the educational aspect, scales the teaching. The desire of the scale-makers is to get such a standard as shall enable teachers to use one another's results by reference to a recognised norm. Thorndike's writing scale and Avres' spelling scale supply excellent illustrations of efforts that approach very closely to the objective standard. Here again, however, the subjective element thrusts itself in, for in the use of the scales the personal equation of the teacher once more makes itself felt. When looking at

the elaborate sheets of specimens set out on the wall, the observer is impressed by the objectivity of the whole. But, after all, in making the comparison between a given piece of handwriting and the various standard specimens on the wall, the teacher's personality counts for something: the subjective element is distinctly present. In the spelling scales the subjective element is somewhat better dealt with, and the general feeling among educationists is that some progress is being made all along the line towards a gradual elimination of the subjective. We may never be able to get absolutely rid of it, but if we gradually obtain such a freedom from subjective interference as shall enable us to make a quantitative discount of its influence, we may comparatively soon be in a much better position than we have ever hitherto been for reaching a workable objective standard.

## CHAPTER V

### *THEORIES OF METHOD*

IN this chapter we treat of matters that specially concern the practical teacher. While in the matter of the broad theory of education he must admit the educationist to equal rights of interpretation, in matters of instruction he ought not to be called upon to take orders from anyone. In the class-room he is on his own quarter-deck, and is master of the situation. But between the broad principles of education and the more technical principles that must guide the teacher in the actual work of instruction there is a borderland in which both educationist and practical teacher are interested. This is the realm of discipline, and the fact that it has a double interest is vouched by the double meaning attached to the word *discipline*. In the broad general sense with which teacher and educationist are alike concerned, it refers to the educational effect produced by work in school. It takes account both of the effects produced on the mind by the study of the various subjects, and also of the general effect produced on pupils by living and working in the school community. In a general way discipline refers to the learner's or disciple's attitude, as compared with *doctrine*, which belongs to the master's side.

On the other hand, the term *discipline* among professional teachers, particularly among those of the elementary grades, conveys almost exclusively the meaning of controlling classes. "A good disciplinarian" to them means one who has his classes well in hand, and has no difficulty in keeping them in order. It is in this narrower sense that great differences of

opinion have arisen, and mere educationists have joined in with theories of their own. Speaking generally, these outsiders are in favour of a milder discipline than pleases, at any rate, the older type of teachers. Up till about a century ago the profession as a whole was given over to severity. To the teachers of those old flogging days it has been suggested that the name *phlebotomists*—that is, vein-cutters or blood-letters—should be applied. But modern theory is so strongly opposed to these old brutal methods that they no longer count in the realm of educational theory.

To-day we hear a great deal about what is called “free discipline,” which is just the opposite of the repression theory. Its extreme exponents want absolute freedom for the educand. Even the mild régime that took the place of the old phlebotomy is resented by the free disciplinarians, for it implies a definite though mild interference with the free development of the educands. Men like Thomas Arnold and Edward Thring certainly used no undue pressure on their pupils, but by the very force of their character they exercised a clearly restraining influence on them. Critics like Norman MacMunn called such teachers *impressionists*, and objected to their imposing their own personality on their pupils, however good that personality might be. The educand must be allowed to grow up into his true self without having any determining influence brought to bear upon him. The extreme free disciplinarians—sometimes classified as *emancipationists*—want the educands to be left really free: the educator is not even to suggest. The experiment of the anarchic school has been made on Tolstoi's estate at Yasnaya Polyana and at several other centres, with varying success, but these practical experiments have done little to settle the vexed question of the relation between the teacher's authority and the pupil's freedom. Without doubt the trend of modern theory in this matter is towards greater freedom for the pupil,

though there is a strong conservative party that is keen to preserve the restraining influence of the teacher.

There is a sharp difference of opinion between the Froebelians and the Montessorians on this point, the latter complaining that their rivals are always in the limelight, whereas the teacher's true place is in the background. The popular notion is that in a Montessori school the pupils can do as they please. This is not quite so; certain definite restrictions are placed upon the pupils in order to make the community workable, but restraints are reduced to the minimum. In particular the teacher must not interfere even by suggestion. So neutral must she become, indeed, that in the scheme there is no talk of teachers, all the Montessorian staff being known as "directresses." There is room for both the Froebelian ideal of leadership and the Montessorian ideal of teacher-effacement, but there is no doubt as to the tendency of modern theory. It is decidedly in favour of the greater freedom of the pupil.

The natural reconciliation between the authority of the teacher and the freedom of the pupil is to be found in a sharing of the responsibility. This partnership must be real; the extreme free disciplinarians demand that the pupils must not be fobbed off with an appearance of freedom, while all the time the teacher in the background pulls the strings. But in most cases the teacher who adopts the plan of free discipline keeps quite openly a veto on the decisions of the council of the pupils who carry on a school on a self-governing basis. This is usually found to be a satisfactory compromise between the reactionaries and the less violent of the emancipationists.

It is worth noting that even in cases where the teachers are unwilling to make any concessions to the new disciplinarian ideals, there is still a notable mildening of the old repressive methods. One can understand how the general spirit of the age produced

this amelioration, but the question remains: What means have the more conservative teachers adopted to fill the place of the old harsh methods? The answer is to be sought in the word *interest*. It is found that, by the use of proper methods, pupils can be aroused to take an interest in their work, and thus find an incentive to keep their attention fixed upon it. Naturally not all teachers have the power to rouse this interest. Some do not care to take the trouble, and still others honestly hold the view that it is bad policy to allow pupils to expect to be coaxed into learning things by having them made interesting in class. It is this last group of teachers who speak lovingly of "the good old grind." They say in dead earnest what Mr. Dooley says in fun: "It does not matter very much what the childer learn, so long as it is disagreeable enough."

Over against the "good old grinders" may be set what are derisively called "the primrose-pathers"—those who seek to make of the educational course a case of "roses, roses all the way." Neither of the opposing groups is wholly right, but modern sympathies are rather on the side of the primrose-pathers. No doubt the severe school have justice on their side when they maintain that young people must learn to face disagreeable things, and must not be so trained as to expect everything to be made easy and pleasant for them in the world for which they are being prepared. But we must not confound the interesting and the pleasant. One can imagine a vast variety of circumstances that are intensely interesting and at the same time extremely unpleasant. The world, as the good old grinders tell us, with sombre satisfaction, will probably not be a very pleasant place for their pupils, but it certainly will be an interesting one, for a while at least, and no danger is incurred in preparing them to be interested in their surroundings.

Drudgery must be faced, no doubt, both in the



school and in the world, but it is not in itself a desirable thing. Even the grim old grinders themselves would not take pride in their schools as providing the finest curriculum in drudgery, or in producing the finest crop of drudges each year. Drudgery is not to be cultivated, but eliminated. If the term stands for meaningless toil, it may be easily sublimated into mere hard work, by the introduction of meaning. Even the hard work that remains will not be altogether unattractive. If "the labour we delight in physics pain," we can understand the steady and apparently monotonous toil of youngsters at the nets, or on the racing track when no matches are on.

Passing now to the actual methods of instruction, we reach the plane where the mere educationist comes at his peril, and the practical teacher feels that he is specially at home in educational theory. No doubt the mere communication of knowledge has definite educational effects that cannot be quite separated from the nature of the matter communicated. The educationist is legitimately concerned with these general effects, but the actual process of communicating knowledge is the teacher's special affair, and he naturally has great interest in the underlying theory.

To begin with, methods of instruction fall into the two groups, general and special, the first dealing with instruction in itself and apart from any consideration of the nature of the subject-matter and its special needs, while the second keeps in view the particular qualities of the matter to be taught and modifies the general methods accordingly. The general methods themselves may be arranged in three groups, according to the division of initiative between the teacher and the pupil in the actual process of teaching.

We have first the didactic method, in which all the initiative lies with the teacher. He feeds in information to the pupil, who absorbs it as best he can. Lecturing forms a natural illustration of this method,

and some people are inclined to describe it as a uni-polar process. But this is hardly accurate, since in the actual process the two poles are in active operation, though the pupil-pole is kept at work under the surface. In a good lecture the listeners have to do as much work as the speaker, and in many cases more, since they have not had the previous preparation that he has.

The second is often called the dialectic method, in which teacher and pupil seem to have an equal share in the initiative. Ordinary class-teaching with its rapid give and take between teacher and pupil exemplifies the dialectic attitude. In accurate classification probably we should have only two groups—the didactic and the dialectic, for the third group is really a dialectic form.

The justification for making a triple classification is that the third form, known as the heuristic, makes a convenient balance to the didactic in relation to the dialectic. Taking as basis of classification the amount of initiative left to each of the two parties, the teacher and the pupil, we find that the didactic gives the pupil practically none, the dialectic shares the initiative as equally as possible between the teacher and the pupil, while in the heuristic method the whole responsibility for initiative is thrown upon the pupil. For the heuristic method is the comparatively recent addition to the teacher's armoury that throws upon the pupil the work of finding out things for himself. The teacher puts the pupil in the position where he may be reasonably expected to make headway on his own account, and leaves him there to work out his own salvation. Sometimes the thing is carried too far, as when the pupil is put in the position of some historic discoverer, and then left to see whether he can make the discovery in question. For example, the pupil may be given exactly that amount of chemical knowledge that Priestley had just when he was on the brink of

discovering oxygen, and then left to discover oxygen on his own account. But this is to expect too much from the method, to say nothing of the boy. Apart from the mere amount of knowledge, we cannot put a schoolboy into the same position for discovery as a mature and highly trained man. The advantage of the heuristic method is to be found in the state of mind it encourages in the pupil.

Taking the three types of general method, it is to be noted that the modern tendency is towards the third. Educators are more and more leaning towards methods that throw the responsibility on the pupil. In a way this implies a tendency to throw aside the technicalities of method as too rigid limitations to the freedom of teacher and pupil alike. This tendency is all to the good, for one of the great disadvantages of methodology in the past has been the rigidity with which methods have been applied. This has been, and is, particularly true where apparatus is involved. The "gifts" and "occupations" of the Froebelian scheme, and the technical apparatus of the Montessorians, supply vivid examples. The fundamental merits of such schemes are sometimes rather lost through the scrupulous attention demanded to the details of an over-systematised manipulation of apparatus.

So devoted to their schemes do some of these methodologists become that they actually go out of their way to minimise the share their own personality has in securing success, in order to give the greater credit to the method itself. The Frenchman Jacotot, for example, invented a method that he boldly called "the universal method of instruction." By its application he produced some rather remarkable results, the full credit for which he passed on to his method, though without the least doubt a great deal of his success was due to his own personality. It is true that other educationists, like Ratke, have such faith in their methods that they believe them to have a market value,

and try to make money out of them. But this attitude is remarkably rare in education. Inventors of educational methods are only too glad to throw them open to the world, without money and without price.

Probably the most important element to be considered in educational theory in connection with methodology is the correlation between the personality of the educator and the method he adopts. We are apt to regard methods as intrinsically good or bad. No doubt there is a justification for this classification, and we have seen that we are probably approaching a stage at which we may be able to apply some sort of an objective standard. But in the last resort methods must stand or fall by their suitability to the person who adopts them. There is, without doubt, a considerable body of sound doctrine on method imbedded in the pages of the various "Manuals of Method" that have had their day. These generally accepted principles of method are no doubt universal enough to meet the needs of any individual average teacher, but the moment we reach the stage of special methods we must each make our own individual choice.

Not only do methods vary in suitability for different individuals, but they vary in suitability for the same individual at different stages of his development. Teachers sometimes become worried about their own progress, so every few years they change their methods, and think they have made an improvement by the change. Sometimes their satisfaction at their progress is chastened by the thought that in a few years they will be looking back at their present methods that they think so good with the same contempt as they now regard their methods of a few years back. Their comfort must be that "each thing in its place is best," and that the method they formerly used, and now despise, was the most suitable for them at the time at which they applied it.

What is true of the individual may be applied to

the race in a general way. We are always looking out for some new thing in the way of education, and particularly in the way of method. To-day we have got the length of speaking of *the New Education*, just as we talk of the New Theology, the New Art, and the New Poetry. In the ultimate resort there is no New Education. As the French saying has it, the more these things change, the more they are the same. Yet there is a sense in which it is new. Each generation demands a fresh presentation of old truths. So this so-called New Education is merely the twentieth-century reaction to truths familiar to previous generations in a somewhat different form.

We are fond of telling each other that this is a period of change, that we are at the parting of the ways. Then we tell each other that people have always said this in every age. Finally, we add that this really does seem rather more of a turning-point than usual, that, in fact, it is a genuine nodal point. Certainly it seems hard to find a time when there were quite so many new educational methods flying about, so, begging the question of the absolute newness of the education of to-day, we may fairly set about finding what is its characteristic quality.

Such a quest at once reveals the oldness of the New Education. For the quality that stands out most prominently as a feature of the vast number of new educational plans and methods is the very old one of concentrating the teacher's attention on the pupil. Naturally there never was a time when the educator could altogether neglect the pupil, but there was a time, and that not so long ago, when the teacher's interest in the subject-matter he taught was more pronounced than his interest in the pupil. So important did G. Stanley Hall regard this change of attitude from a previous period that he invented a word to indicate it. When he used the term *paidocentric* he indicated that the trend of education is towards

putting the pupil in the centre of educational interest. The question naturally arises: What occupied the centre before? An answer might be found by inventing a term as cumbrous as Stanley Hall's own, and saying that the preceding education had been *materio-centric*—that is, where the main interest is in the subject-matter. In the old days the master was much prouder of his knowledge of Latin than of his knowledge of the boys to whom he taught that language. But to-day the position has been so much reversed that teachers are accused of knowing their boys better than their Latin. Trainers of teachers are sometimes charged with spending all their time in the study of the boy, while they neglect the subject that is to be taught to him.

If paidocentricism may be justifiably treated as the characteristic of the New Education, we ought to find that all the newer methods are strongly paidocentric. Probably the most striking new development of education in this generation is Montessorianism, and it is fundamentally paidocentric. We have seen that Dr. Montessori puts the child in the forefront, and insists upon the teacher keeping in the background. Her scheme is intensely paidocentric.

Out of the Montessorian system has arisen a scheme that has made a very popular appeal—the Dalton Plan. Here we have paidocentricism rampant. Each pupil is thrown on his own responsibility, and the teachers rank as advisers and helpers. They have to take their place in the background—a very hard-working and important background, but still a background.

The Gary Plan does not at first sight bear a very paidocentric look, for its leading idea is a manipulation of architecture to improve scholastic work. But when we look into the matter we find the pupil dominates everything, and that all the architectural innovations are introduced in his interests. He is emphatically the unit of the whole, and the school

architect is called upon to fit the buildings to his needs.

Take, again, the Project Plan. Here, if anywhere, one would think that the subject-matter predominates, that the scheme, in fact, centres round the subject-matter, is, indeed materiocentric rather than paidocentric. But when we begin to examine the working of the theory we find that the whole value of the plan lies in the way in which it fits into the needs of the pupil. It is really an exemplification of Dr. E. C. Moore's theory that the business of the school is to enable the pupil to make himself at home in his environment. The plan puts the school in the position to give just that intensified and specially organised experience that justifies its existence. Obviously the pupil is in the very centre of the Project Plan.

The same is true all along the line. If one cares to take a book like Ernest Young's *New Era in Education* and look into the series of experiments and innovations in education, one will find that it is possible in almost every case to apply the adjective *paidocentric*.

## CHAPTER VI

*THE COLLECTIVE ASPECT*

In the last resort, no doubt, education is an individual matter between educator and educand. This may be regarded as the sort of ultimate unit of education, out of which the whole system may be worked up. For while there are only two persons—indeed sometimes only one—involved in the deliberate process of education in a given case, the activities of many more are essential before the process can be carried to a successful issue. So far as mere communication of knowledge is concerned the affair can be carried on as a private matter, but in the wide sense of *education*, a bigger stage and the presence of many actors are required. Goethe has a couplet that almost every German schoolmaster used to make his pupils learn by heart. Its translation runs: "A talent may be cultivated in solitude, but a character needs the whirl of the world." Man is, as Aristotle told us long ago, a sociable animal, meant to live in communities, and unable to attain his full development apart from his fellows. The solitary is not a real man. He must either be a superman and rise to the status of godhood, or fall below the human level and become a beast. Education has, therefore, to take account of the social aspect, even when the educator's main concern is with the individual educand.

So far we have been considering education purely from the bi-polar point of view, in which two persons react upon one another, or even two aspects of the same personality react upon one another, within the experience of that personality. But now that we find that education in the fullest sense cannot be carried on entirely apart from human intercourse, we must look



into the community aspect. In one of his wise but cryptic remarks, Aristotle tells us that the State is prior to the individual. Naturally, this is not meant chronologically. A state cannot exist without individuals to make it up. Yet it may exist in idea, and may be implied in the very nature of the individuals that are afterwards to enable it to realise itself as an actuality. This Aristotle recognised when he speaks of man as being by nature gregarious, a creature that can attain full development only in a community or state.

It is obvious that this collective education, that comes from intercourse with others in society, is a kind of by-education, though there is this difference in the case of school intercourse, that we are dealing with deliberate arrangements by which social interaction may be utilised for educational purposes. But aside from the partly organised and partly haphazard intercourse of the playground and the school recreation-room, there is a definitely collective aspect of the school instruction itself. All the difference between class-teaching and private coaching comes in here. There is a very general impression that the private coach has a great advantage over the class-teacher, and some writers explain that school classes exist only because it is impossible to afford one teacher for one pupil. No doubt, in the matter of mere instruction, the private coach has certain conspicuous advantages; but even in instruction there are some points in which the class-teacher has the advantage. In the give and take of class-work pupils get the benefit of profiting by the correction of the errors made by their fellows, and by having brought to their notice unexpected ways of dealing with the subjects of their course. This advantage of corporate work is still more marked in the social and moral reactions that are an essential part of a system of education by classes in school.

It may be suggested that we have in this collective form of teaching a multi-polar rather than a bi-polar

process, and to some extent the criticism is justifiable, but it does not affect the general proposition that education is bi-polar. For though there may be fifty pupils in a class the teacher's reaction in the process of instruction is with each of them individually. Even in the case of the mass reaction that marks collective work, it is still a case of the interplay of one pupil on the one hand and all the others as a collective unit on the other. It is still a case of bi-polarity.

We have seen that many people regard class-instruction as inferior to teaching by a private tutor, but some go farther and treat the class as something in itself objectionable. Among these is Dr. Montessori, who dislikes the class so much that she is said to claim that she has rung the death-knell of class-teaching. Critics sometimes do not notice the exact form of her claim. She does not profess to have superseded the class, but only to have eliminated *class-teaching*. While her "directresses" do not undertake collective work with the children, they do arrange to have a certain group of youngsters under the control of one person. These groups—often numbering forty or a little over—are really classes for all but teaching purposes. Probably it is a weakness of the Montessorian system that it has not quite recognised the importance of collective work in education, and there are traces that the Montessorian schools are departing from the rigid individualism of the founder's pure and unadulterated method.

The truth is that the two functions of the class are not clearly separated from one another in the popular or even the professional mind. While the Montessorians do not recognise the class as a teaching unit, they not only recognise but use it as an organisation unit. The class as it exists in our schools to-day had an economic origin. Education certainly began as an individual process. No doubt at the early tribal stage when some member of the community was set apart, or set himself apart, for the training of the youngsters,

he would find it convenient to gather them all together at stated intervals in a suitable place, but, except in the matter of ceremonial rites, he would probably not deal with them as a collective unit. It may be argued that in the medieval Universities we have a case of class-teaching, since well-known professors used to have enormous audiences. But they were audiences, not classes, groups of individuals, not collective units, except in so far as on occasion the eloquence of the professor roused the collective spirit and the audience became, for the time, a psychological unit.

The school class as we know it to-day no doubt began as an organisation unit. In the primitive schools there would always be a wide variety of age and attainments among the pupils, and the single teacher would find it expedient to group them into sets of about equal age and attainment. By-and-by, when schools grew in size, and the staffs increased, it would be possible to organise in greater detail, but still the basis of organisation would be instruction. It is only in the schools of to-day that a modest beginning is being made of the application of collective psychology to the manipulation of the class. Hitherto the size of the class has been determined by the amount of individual attention each pupil required. Economic considerations fixed a limit, but within that limit each teacher was expected to do the best he could for each individual pupil. The economic limits were in most cases very cramping, and teachers, particularly in the elementary schools, were in a continual state of protest against the unwieldy numbers they had to deal with.

One effect of the study of collective psychology and its application to educational theory is the realisation that the proper number of pupils in a class is to be determined in relation to the nature of the subject to be treated. For some kinds of work a large class may not only be no drawback, but a positive advantage. Subjects like languages, mathematics, and most kinds of

science demand very moderate numbers, but subjects like morals, the spiritual side of religion, appreciation work in art and literature—in fact, all the subjects that are sometimes called “inspirational,” benefit rather than otherwise by being taught in large classes. What used to be called “gallery work” in England, and is beginning to be called “auditorial” work in America, includes lessons given in a gallery or in an auditorium to a body of pupils made up of different classes gathered together for this instruction in common. Experience has shown that teachers differ greatly in the number of classes they can deal with in this combined form. Indeed, it is beginning to be realised that teachers may be graded in this matter, each having a co-efficient of power of collective teaching. Some can manage only a couple of classes, others are three-class men, others five-class men, still others seven-class men, while some few seem to have no limit beyond the capacity of the auditorium and the carrying power of the voice. Psychologists are beginning to speak of the range of the teacher's effective personality, and to say that each teacher has an area within which he can make his personality effective, and beyond which his power does not extend. This range does not seem to coincide with the reach of the teacher's voice, but is something independent of mere sound. All this carries us a little farther in theory than we can definitely express, but out of the whole comes the clear conclusion that the size of the class must be considered from two points of view, and that schools must be organised accordingly.

In the secondary schools the size of classes has not been such a vital question as in the elementary, and in the Public Schools of England it has been of comparatively little importance. In point of fact, in these schools the collective element has been allowed free play in other directions. “The building of character” is a phrase that covers a great variety of Public School

processes, but it indicates a very definite general aim that includes not only what is sought for in the class-room but a great deal more. Nowhere has the collective spirit been more used or more successfully than in the Public Schools of England.

This excursus beyond the range of the fundamental unit of education, which is the interaction between the individual educator and the single pupil, leads on to the wider problem of the relation between the individual and the State in the matter of education. It is generally taken for granted that the State has the right to determine the kind of education to be given to its citizens. So far back as Aristotle we find it laid down as a principle that politics is architectonic to education, by which it is meant that since the politician,—or rather, let us say, the *statesman*—has to use the material worked up by the educator, he, as statesman, is entitled to say what that material shall be. In other words, the educator must take his orders from the statesman.

As a matter of fact, this principle is adopted wherever a national system of education is established, at any rate at the elementary and secondary grade. At the University level there is usually an understanding that there must be perfect freedom of teaching. The educator at this Higher Education stage comes into his own. But at the school stage the statesman is permitted to give his instructions to the educator, so far as the *kind* of education is concerned. It is understood that the method of producing the type of citizen the statesman demands is left to the educator. Within the class-room the educator is his own master, except in those unwholesome cases where the statesman, by the use of an inspectorial system, penetrates to the class-room itself and dominates even the theory and practice of education.

This interference with education from above raises a problem of much interest in educational theory. So

soon as we pass from a consideration of the interaction between the individual educator and the individual educand to an examination of the relation between the Government and the schools we have to view education in an entirely new light. No doubt there is a certain parallel between individual and national education when we take account of the fact that individual education usually resolves itself into a process in which educator and educand are combined in the same individual. Wherever a nation has established a system of education it has given proof that it has come to collective consciousness of itself. National education implies that the people of that nation have examined themselves and made up their minds that as a nation they are not all they desire to be, and, therefore, have taken steps to modify themselves on the lines that will give them satisfaction.

The new light in which education must be regarded when we introduce the idea of national education, and treat the nation as itself at the educator-educand stage, is brought out by the fact that by treating the nation as a collective unit we are raising it to the rank of a personality. No doubt critics are at hand in abundance—Max Nordau is one of the most trenchant of them—who pooh pooh this theory, and sarcastically demand that this collective personality, in order to justify its existence, ought to have all the animal organs, and should even have sex. As a matter of fact, a writer of distinction, J. C. Bluntschli, does introduce the sex aspect into collective personality, and speaks of the State as masculine and the Church as feminine. But we need not take things so literally as all that. It is enough to recognise the State as a collective unit that, at least in a metaphorical sense, may be treated as a personality. History offers many examples of nations acting in what must be regarded as a personal way. Two in particular are worthy of consideration since they both adopted an educational line.

When in 1868, almost in a night, the Japanese nation westernised its education, we have an example of this working of a national personality. No doubt there were individual leaders who guided the movement, but, after all, a change so radical could not have been imposed on people that were hostile to it. The Mikado and his advisers might lay down certain laws and have them obeyed. But they could not introduce a change that was revolutionary, and that struck at the roots of customs and traditions of immemorial antiquity, unless the spirit of change had been leavening the whole lump of Japanese social life.

Perhaps even a clearer example of the coming to self-consciousness of a nation is provided by the German people after the Battle of Jena. The folk were under the heel of Napoleon, who took away from them all power in every direction—laws, revenue, excise, foreign relations, commerce. But there was a remarkable exception: Education was left untouched. Napoleon is reported on a certain occasion to have said that he had no time to spend on matters of A B C. It is all the more striking that he should have neglected education in Prussia, since at that very time he was completing an educational scheme at home that had for its definite purpose the control of the intellect of France, as he had already secured the control of its physical resources. In any case, the Germans were not slow in seizing on the one loophole left them. The philosopher Fichte went about the country delivering his famous *Addresses to the German Nation*, urging the people to take themselves in hand and make of themselves a greater nation than they had ever been before. He had the co-operation of a group of learned and public-spirited men, and the result was complete success. When the time was ripe, Bismarck was able to say that at Sadowa and at Gravelotte it was the schoolmaster who conquered.

What is seen in a specially striking way in these

two instances may be observed working in a normal and undramatic way all over the world. At the present time in Italy there is going on a process of re-education that illustrates a somewhat different state of affairs. No doubt in the person of Mussolini we have the origin of the whole movement, but his inspiration has been such that the nation appears to have responded, and leader and people alike have united in a conscious attempt to reproduce in the nation the spirit of old Rome. All this affects the grown-up population. But the startling thing is that use is also being made of education at the elementary stage. Instructions have been issued to the teachers that they must think for themselves, and more than that, they must teach their pupils to think for themselves too. Could anything be more unlike what one would expect from a dictator?

While most people regard the use of education by a nation as a legitimate way of making the most of itself, some doubt arises when the leaders of a nation set about using education as a means of moulding the people for political ends. When the Reform Bill of 1832 made England essentially democratic in the matter of government, one of the English statesmen reported to have said, "Now we must educate our masters," meaning the common people. This is really a political question, one to be dealt with by the statesman rather than by the educationist. But there is a correlative problem that really does concern us here.

The State-versus-the-individual controversy raises the important question of the standardisation of education. Many people are greatly concerned about the loss of individuality involved in the uniform education now being provided for each stratum of society in most countries, and for the whole of the people in the case of the United States. We are getting intolerably like one another all the world over, in dress and customs and general outward matters, and now this uniformity of education threatens a similar sameness in our ways



of thinking. But there is a danger here of confounding individuality and eccentricity. We must be allowed each to develop in his own way along the lines of his own nature, but this does not imply that each of us must be totally different from all the rest. No doubt, from the artistic point of view there is something to be deplored in mechanical uniformity. Most of us sympathise with Dickens in his distaste for the 140 young teachers turned out each year from a certain Training College, all as like one another as so many pianoforte legs. But the figure goes too far. It is, fortunately, impossible to turn out human beings as like one another as articles made by machinery. No doubt a great degree of superficial resemblance may be imposed by education, but there is a limit to the amount of similarity, and a compensation for the sameness that can be imposed.

Some educators have got an inordinate horror of the commonplace. Clever themselves, and proud of their outstanding personality, they fail to appreciate the fact that commonplace people enjoy being commonplace in their own commonplace way. It has been wisely said that one of the chief difficulties of a clever teacher is to allow his clever pupils to be clever in their own way. In the case of dull pupils, the clever teacher's difficulty is even more marked. He spends a great deal of good sympathy where it is not at all needed. Like one another as people may be made by education, they find life very tolerable, and are, after all, not so startlingly alike as critics imagine. Just as all faces are in a general way alike, and yet every face has its unique qualities, so our minds may have a general resemblance and yet be essentially unique.

The compensation underlying this degree of similarity produced by education is that the great body of the people of a country have common backgrounds, and understand one another's point of view. When J. R. Green described England as at one time a country

of one book—the Bible—he indicated one of the strong points of a standardised education. The people had a common background and had a basis for discussion, but one would be ill-informed who inferred that there was excessive uniformity of opinion in the England of that time. After all, uniformity of acquired knowledge is far from ensuring uniformity of thought and opinion. To be sure we must all think alike so far as the process of thought is concerned. It is because the laws of thought, as thought, are so uniform, so unchangeable, that we can rely upon our neighbour drawing the same conclusions from logical statements as we do. So that if education trains the mind to work uniformly, and supplies a competent background of information, people are in a very fortunate position, even though our background has a rather close resemblance to our neighbour's.

And, after all, with regard to the mental content supplied at school, is there such an excessive degree of resemblance in the minds of the population of a country? The chances are that trouble will rise rather from lack of correspondence than from excessive resemblance in most backgrounds that are compared carefully with one another.

## BIBLIOGRAPHY

- Adams, John : *The Evolution of Educational Theory* (1912).
- Bagley, W. C. : *The Educative Process* (1906).
- Bode, B. H. : *Modern Educational Theories* (1927).
- Bolton, F. : *Principles of Education* (1906).
- Browning, Oscar : *An Introduction to the History of Educational Theories* (1881).
- Butler, N. M. : *The Meaning of Education* (1898).
- Findlay, J. J. : *The Foundations of Education* (1927).
- Henderson, E. N. : *The Principles of Education* (1910).
- Jones, W. Franklin : *The Principles of Education* (1911).
- Laurie, S. S. : *Institutes of Education* (1892).
- Leathes, Sir Stanley : *What is Education?* (1913).
- Moore, E. C. : *What is Education?* (1913).
- Nunn, T. Percy : *Education: its Data and First Principles* (1920).
- Quick, R. H. : *Essays on Educational Reformers* (1901).
- Terman, Lewis : *Measurement of Intelligence* (1916).
- Welton, J. : *What do we Mean by Education?* (1915).