EDUCATIONAL THEORY IN THE TWENTIETH CENTURY*

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IN educational theory throughout the twentieth century, we have been steadily made more and more conscious of the inexorably rising tide of collectivist thinking that has washed through and filled the main channels of political and social thought as the century has progressed. The manner in which, in step with the general climate of the time, emphasis in educational thinking has moved from individual to group, and from an interest in subject-matter to an interest in human relationships is an illustration of the impact the collectivist climate has been making on our educational theory. This lecture is an attempt to sketch and document some aspects of this theme.

The early years of the twentieth century were the heyday of Herbartianism in education. Since Herbart's death in 1841, his educational and psychological theories had been kept alive and developed by a steadily increasing band of German theorists. It was not, however, until Wilhelm Rein came to the chair at Jena and developed a seminar with a strong Herbartian bias in 1886 that Herbart's influence was felt much beyond the limits of his native land. Then, for the next generation, the closing years of the nineteenth and the opening years of the twentieth century, it was Rein's interpretation of the master which set the pattern. One of his American admirers wrote, in 1895: "Dr. Rein has made the pedagogical seminary at Jena the most noted of its kind in Europe, to which students resort from every civilized country." Perhaps one implication of this statement was that if a country did not send students to Jena then it was not a civilized country! At all events, Australia hastened to show its sophistication in these matters. Both the first Professor of Education in the University of Melbourne and the first Professor of Psychology in this University were products of Rein's seminarium.

The Herbartians provided a logical and systematic basis for classroom instruction. They took up a form of associationist psychology popular throughout the nineteenth century and built on it a scheme of learning and teaching which had such a wide appeal and became so deeply rooted in educational thought and practice that it still remains the basic procedure in schools to the present day. Few teachers recognize or acknowledge this, but it is still true, even in the more progressive countries, that, like Molière's Bourgeois Gentilhomme, who had been talking prose all his life without knowing it, our teachers have been and still are teaching along Herbartian lines, usually without knowing it. This is not a tribute to the far-sightedness and satisfactoriness of the educational theorizing of Rein and his contemporaries—I think

* Inaugural Lecture delivered by Professor W. F. Connell, Ph.D. (London), A.M. (Illinois), M.A., M.Ed. (Melbourne), at a meeting of the Association on 13th November, 1957.

they would be shocked to find their influence so durable—it is a commentary on an almost inevitable tendency of the human mind, more especially as it appears in the teaching profession. It seems to be the fate of successful revolutionaries to be canonized, by succeeding generations, and to have their work and thought, rather than their spirit, become the model for imitation, and the safe orthodoxy of the next generation. Among teachers, and professors of education are not excluded from this category, there is an almost overwhelming temptation to adopt a routine and to standardize a practice that has been found to work satisfactorily in the past. Hence, while educational theory has bounded ahead in the last fifty years, classroom practice has not moved very significantly in the majority of schools.

What I wish to do in this lecture is to take up two aspects of educational theory which were examined and held to be of importance by the Herbartians, to trace them through the vicissitudes of the last half century, and to show how the most prominent present-day tendency is to seek to link them together and illuminate them through some common social theory.

The Herbartians' famous theory of apperception round which the formal steps of teaching were formulated starts with the arousal of an individual's interest. An interest in interest and its pedagogical significance is one of the main contributions of the Herbartian school to educational theory. Before their influence became widely felt it was comparatively rare to find educators attaching much importance to interest. Emulation, discipline, natural impulse, system and suchlike were the watchwords of a successful educator. If interest was alluded to, it was not usually regarded as a key element in the teaching process. It was the Herbartians who made it so. It became for them and has remained with us, the foundation of method. So important has it been that it has assumed almost a theological cast, as educators have become accustomed to referring to the Doctrine of Interest. The semi-sacredness of its nomenclature, however, has not protected it from criticism and challenge and further development by educational theorists.

Interest has entered into educational thinking in two ways, as an aim and as a basis of method. One object of education, it is held, is to develop interested people, people who have had the opportunity to explore their capabilities and build up a number of abiding interests in a variety of things. Being interested is the reality of life. The worthwhileness of living depends upon the extent and the intensity of one's interests. One of the prime tasks of education therefore is to develop individuals with a many-sidedness of interest. Charles A. McMurry, in 1905, in his book *The Elements of General Method based on the Principles of Herbart*,[1] wrote : " By interest, as commonly understood, we mean the natural bent or inclination of the mind to find satisfaction in a subject when it is properly presented . . . In our eager pursuit of intellectual training and knowledge we sometimes forget that the interests or sensibilities awakened by knowledge are what give it personal significance to us. So long as a child has acquired no interest in history, he is a stranger in a foreign land, no

[1] C. A. McMurry, *The Elements of General Method* (1905), p. 85.

matter how many of its facts he has memorized. He is disposed to wonder what it is all for. It has no meaning for his life, but his faith in it depends upon the judgment of others imposed upon him; that is, upon authority. But when his interest is once awakened in a subject he feels its value and its relation to his needs. Without this judgment of value springing from his own perception of worth, he is almost certain to regard knowledge as an imposition, an impertinence, an intrusion."

With this statement McMurry introduces us to the second manner in which interest was held to be of crucial importance in education. It is an essential ingredient in the learning process. Learning takes place, according to the Herbartians, by absorbing new material into some form of connection with the old that has been previously acquired. " The readiness and willingness of the old thus to take in the new was what the Herbartians called *interest*. As they saw it, there could be no learning without some prior interest on the part of the old for the new, some ' inviting in ' of the new, as it were, by the old as needed for its completion."[2]

At the time when this aspect of learning theory was making its way in the early part of this century it met with considerable opposition from the more conservative thinkers in the profession. To suggest that an individual could not learn unless he was interested in the material to be learnt implied for many that the material to be learnt should be made interesting, that one of the prime tasks of a teacher was to make his teaching material interesting. What sort of character training did this kind of teaching offer ? Where children came to expect to be beguiled into learning and every lesson started as a kind of entertainment, how could they be trained to face the stern realities of life and to realize that worthwhile learning called for sustained effort ?

An attempt to reconcile the opposing parties was made by John Dewey[3] in an address which was enlarged into a monograph and published in 1913 as *Interest and Effort in Education*. This was, in its time, a very significant treatise. The editor of the series in which it appeared went so far as to write : " If teachers and parents could know intimately only one treatise on educational procedure, it is greatly to be doubted that any other could be found which would, within small compass, so effectively direct them to the points of view, the attitudes of mind, and the methods of work which are essential to good teaching."

Dewey suggested three things. First, he pointed out that both parties were in error in assuming that the matter to be learnt was something external to the learner which had to be made interesting or to which the learner had to be made to attend. Once this assumption was made, then the opposition of interest to effort was almost inevitable. Inducement or coercion became the alternate gods of the teaching profession. He went on to show, secondly, that, in human activity, interest and effort can normally be expected to support one another, the greater the interest felt, the greater the effort exerted. They may both be regarded as subserving the same purpose, and as complementary phases of the same piece of behaviour. This can be

[2] W. H. Kilpatrick, *Philosophy of Education* (1951), p. 272.
[3] J. Dewey, *Interest and Effort in Education* (1913), p. v.

seen to be the case, he pointed out, finally, when we think of the individual as a self which is growing and expanding. " The genuine principle of interest ", he wrote, " is the principle of the recognized identity of the fact to be learned, or the action proposed, with the growing self."[4] Interest becomes synonymous not with being entertained but with purposing some meaningful end. This suggests that the separation between pupils' mind and subject-matter to be learnt is false and pernicious. Neither mind nor subject-matter are isolated entities ; mind is nothing more than the material and methods of a developing activity. As it functions, its direction is signified by its interest, and its application and effort by the intensity of identification with or interest in the object of its activity. " Interest ", said Dewey, " is obtained not by thinking about it and consciously aiming at it, *but by considering and aiming at the conditions* that lie back of it, and compel it. If we can discover a child's urgent needs and powers and if we can supply an environment of materials, appliances and resources—physical, social and intellectual—to direct their adequate operation, we shall not have to think about interest. It will take care of itself. For mind will have met with what it needs in order to be mind. The problem of educators, teachers, parents, the state, is to provide the environment that induces educative or developing activities, and where these are found the one thing needful in education is secured."[5]

Dewey's analysis of the " doctrine of interest " represents an attempt to move the discussion away from its original connection with associationist psychology into the orbit of the newly developing hormic school.

Even in McMurry's views, previously quoted, the elements of this movement may be discerned. The natural bent should be studied, he suggests, and also the relationship of subject-matter to a child's needs which require satisfaction. The awakening of these needs induces a state of readiness which is a prerequisite to learning. Here are the suggestions of a new orientation for the whole of educational psychology. This finds its way, from the writings in general and social psychology by McDougall, into the educational field, where it is popularized and applied to the classroom by one of the most persuasive of all educational advocates in this century, Sir T. Percy Nunn, whose book *Education : Its Data and First Principles*, first published in 1920, went through no less than twenty-three reprintings in the course of the next twenty-five years. His approach was to suggest that the most fruitful way of looking at human behaviour is to regard it as the expression, more or less complex, of a number of compelling hormic processes which subsequent psychologists have usually referred to as drives. A hormic process according to Nunn, is " an outflowing of energy of body or mind . . . Such outflowings always tend to clothe themselves in significant forms or patterns."[6] Education is principally concerned with enabling the child to express himself in activities, arising out of these hormic processes, that have ever-increasing value. " That ", said Nunn, " is, for instance, the meaning of the familiar statement that the main task of teaching is to create and

[4] *Ibid.*, p. 7.
[5] *Ibid.*, pp. 95–96.
[6] T. P. Nunn, *Education : Its Data and First Principles* (1947), p. 39.

cultivate 'Interests'."[7] The teacher's task is no longer that of associating the child's present state of mind with the material he is to learn; it is that and something more. The teacher is to study the kinds of behavioural patterns which develop as the child grows, and adjust his teaching material so as to contribute in a desired way to the development of these patterns. An interest is a behaviour pattern in which a child actively engages; and an individual may be said to be interested when he is favourably inclined to engage in an activity which builds on to an established behaviour pattern.

Two strands lead on from this position. The first is that of the Activity School, the second may be described as the "mind-set" school.

It is a small step from Nunn's position just outlined, that the school's task is one of cultivating interests, to the suggestion that the school programme should be based upon the children's felt interests and needs. This is the theory of the Activity School which flourished principally in the nineteen-twenties and nineteen-thirties. Children are regarded as active and purposing creatures; they always have an interest in something. What these interests are it is the duty of the teacher to find out, so that he may use them as the basis on which to develop the school's curriculum. This has taken the "doctrine of interest" far beyond the scope envisaged by the Herbartians. No longer is it merely the fundamental basis of teaching method, it has become also the fundamental basis of the curriculum. This led in turn to a search for interest patterns among children of various ages and stages of development. The Herbartians, too, had been concerned with interest patterns or types of interest. Rein, for example, had proposed six kinds of interests which children could be expected to show: empirical, speculative and aesthetic interest concerned with objective knowledge and valuation, and sympathetic, social and religious interest concerned with the subjective world. Activity teachers, on the other hand, tended to classify interests not under abstract headings, but around activities which children were found to enter into at a particular stage. Thus, they spoke, for example, of activities centring in interests relating to transportation and communication. In this way they constructed centres of interest built around the various objects and ideas upon which interests focus at different ages. From this a quite interesting conclusion was gradually developed and, in time, documented by adequate research.

If, thought the activity teacher, our curriculum is based upon the felt needs and interests of our pupils, are we not committing ourselves necessarily to a highly individualized programme? Should this mean the real knell of class-teaching which Sir John Adams[8] thought he heard being sounded a little prematurely by the followers of Maria Montessori's individualized approach, early in the century? The more the children's interest patterns were examined, however, the less highly individualized they appeared. More and more it came to be realized that they were socially built. Many of these educators who started on the assumption that the needs and interests of children developed out of "the natural unfolding of an innate, private, inner

[7] *Ibid.*, p. 38.
[8] J. Adams, *Modern Developments in Educational Practice* (1922), Chapter VI.

personality, expressing itself largely in terms of demands on the environment ",[9] finally rejected this view. Instead, the evidence which they accumulated led them to infer that " The interests, the purposes and the needs of children are governed, for the most part, by the way the child is related to the social groups in his society, and to the occupations, institutions, and social ideals of that society ".[10] To understand the children's interests, therefore, to be in a position to use them effectively in the learning process or in the design of a curriculum, the teacher has to be thoroughly familiar with the social institutions and structures which shape the children's world and with their relationship to the process of education.

The second strand that issued from the position which Nunn exemplified was the " mind-set " approach to interest adopted by W. H. Kilpatrick.

A good illustration of the basic concept involved in this school of thought is the story recently appearing in the *Readers' Digest* related by a young serviceman-husband.

" My bride of only a few months was at the airport to meet me when I returned from Naval duty. We were waiting for my luggage when I pointed out our good-looking hostess from the plane, Miss Tracy.

" ' How do you happen to know her name ? " she asked.

" I explained that it was listed, along with the names of the pilot and co-pilot, on the door of the cockpit.

" My wife's next question was a classic—which I could not answer.

" ' Dear ', she asked, ' what was the pilot's name ? ' "

The husband's inability to answer his wife's query would be explained by Kilpatrick as evidence of a quite well-known and immemorially established masculine mind-set.

In his *Foundations of Method,* which appeared in 1925, he explained that interest " is simply another way of naming and describing the psychology of mind-set and readiness ".[11] This means that an individual builds up within himself a disposition or series of dispositions towards a particular end which control his activities and make him more sensitive to whatever is connected with those purposes. Expressed originally and narrowly in stimulus-response terms, appropriate to the connectionist approach which Thorndike had made popular in American educational psychology at that time, it was expanded in the nineteen-thirties as the impact of the Gestaltists was felt in social psychology and education. An individual's interests were seen to be bound by the social frame of reference in which he moves. What he perceives and aspires to, the method and manner of his judgment were found to be related closely to the social ground in which his activities take place, just as the background sets off a figure, and, together with it, forms an interdependent structure in which the quality of the figure is largely determined by the nature of the ground against which it appears. If we ask a simple question as, for example, " When did the Second

[9] B. O. Smith, W. O. Stanley and J. H. Shores, *Fundamentals of Curriculum Development* (1957), p. 552.

[10] *Ibid.*

[11] W. H. Kilpatrick, *The Foundations of Method* (1925), p. 138.

World War begin ? " of people with a different national background, we will get a variety of answers. The Englishman will say 1939 ; the Russian, June, 1941 ; the American, Pearl Harbour, December, 1941 ; and the schoolboy in Sydney who has been taught to attend carefully to his books will probably say " at page 561 in Roberts ". For a child, the scale of his interest and its content is set by the scope and practices of the social groups in which he functions. His aspirations and the level of his exertions are determined by the expectations and interests of the various reference groups with which he is related.

Thus the two strands—the Activity School approach and the mind-set approach—have converged in recent times to give a similar emphasis to the field of interest.

Two matters of particular importance emerge. First, interest is no longer regarded as a single concept, a sort of form of attentive feeling which connects a body of subject matter to its learner. It requires work of some intricacy to come to an understanding of it. Readiness, motivation, goal-setting, ego-envolvement, commitment, frame of reference, have become aspects of it which have built up masses of research material in their own right. It has become more obvious as the century proceeds that " interest " stands for a rather complex piece of behaviour difficult to understand and manipulable only with great subtlety. So aware of this complication have present-day writers on education become that, in textbooks published in the last four or five years on methods of teaching or on educational psychology, it is rare to see the term " interest " used at all. The chapters, and even books under that title, of fifty years ago have given way to monographs and articles on readiness, and on varying aspects of motivation or some other facet of that great complex that has shaped the teaching practice of the twentieth century.

Secondly, the more educational theorists have examined problems of method in the light of the Doctrine of Interest, the more they have realized that they are dealing with problems of human relationships. Even in its simplest form, method, as the presentation of material, such as is done in university lecturing, involves a human relationship of teacher to pupil, but it inevitably involves more. The impact of the presentation depends also on the social climate of the classroom or lecture room, upon the relationship existing between various members of the class. Any single pupil's chances of learning a particular body of subject matter may depend in a considerable degree not only upon his own relationship to the teacher, but even upon the relationship of someone else in the class to the teacher and the nature of the social structure of the class. His interest, too, will be determined by the social pressures operating on him at that moment, and the complicated web of social influences into which his life, since its very first moments, has been spun ; and the teacher's ability to engage and build upon that interest will depend upon his insight into and knowledge of the social forces moulding the lives of his pupils.

To understand the individual, it is the collectivity, rather than the individual in isolation, that must be studied. Techniques of teaching rest at bottom on a knowledge of the nature and influence of collective action, of the individual as a relationship, rather than of the individual as a unique unit.

The Herbartians' major contributions to educational theory were not confined to the area of teaching method. In the field of curriculum they produced the idea known as " concentration ". This, like the concept of interest, has had an eventful history over the past fifty years.

It represents an attempt to overcome the fragmentation of knowledge resulting from the habit of teaching by means of separate specialist bodies of knowledge called subjects. How to build a many-sided interest, which would be one meaningful whole, was the problem that the Herbartians were the first to place seriously before educators. The idea of concentration was the solution which they proposed. It was defined by an American educator in 1896 in this way: " Complete unification is the blending of all subjects and branches of study into one whole, and the teaching of the same in successive groups or lessons or sections. When this union is effected by making one group or branch of study in the course the centre or core, and subordinating all the other subjects to it, the process is properly called the concentration of studies."[12]

Rein advocated an " ethical core of concentration ". Education, he held, aimed at producing individuals with certain acceptable traits of character. It is consequently upon the subjects through which these traits of character can best be seen and developed that teaching should concentrate. Literature and history, therefore, selected and treated in such a way as to induce and reinforce moral understanding and good conduct, should be regarded as the core of the curriculum. To this core other subjects should be related to strengthen and fortify it. " The more ", wrote Rein, " the studies threaten to diverge, the firmer must the fusion of the individual parts be made, so that through all multiplicity and variety, there shall never be lacking the fundamental condition for unity of consciousness, for identity of personality, and therefore for the development of moral character."[13]

The term concentration was soon discarded, and correlation, or sometimes, integration, took its place. With this, the idea lost much of its force. Correlation grew to mean simply the relating together of two or more subjects. This was widely fashionable during the period of the First World War and the two decades following. By one of the writers in *The New Teaching*, edited by Sir John Adams in 1918, it was referred to as " one of the most striking characteristics of the new teaching ";[14] a great many pages were devoted to showing how Geography and History could be related, how Art could be brought into most subjects, Mathematics and Physics more closely dovetailed, and English taught by every teacher through the medium of his own subject. The enthusiasm of the period for the vogue of correlation moved Professor H. Johnson, in one of the best books so far written on the Teaching of History, to remark dourly that the business of the teachers of history is to teach history!

[12] Smith, Stanley and Shores, *op. cit.*, p. 312.
[13] C. De Garmo, *Herbart and the Herbartians* (1895), p. 144.
[14] J. Adams, *The New Teaching* (1918), p. 291.

Correlation can be effected in one of two ways: first by relating together two subjects which remain separate units except for the ties established with the other subjects—thus History and Geography would be correlated if, while the history of Rome was being studied, the same pupils were concerned in their Geography lessons with the Mediterranean area; or secondly, by joining two or more subjects together to form a new subject with a broader field—thus General Science and Social Studies, as we know them today. This line of thought has not been pursued very far. What was said about it in 1900 was still being said in 1950. Correlation proved to be a blind alley, or rather one of the Herbartian lodes whose gold was quickly worked out. To relate one's subject-material to other subject-material that the pupil was dealing with seemed a way of reinforcing and raising the significance of the meaning of both sets of subject-material. There has been little more thought about it than this.

On the other hand, the other aspect of the Herbartian idea of concentration has had a considerable development. This was the search for a central theme which would hold together, and enrich the meaning of a pupil's studies. Rein, for example, found this core in the ethical content of the humanistic subjects; Colonel Francis W. Parker, a leading American writer and practitioner at the turn of the century, found it in the natural sciences.

In part, this search was another way of formulating Herbert Spencer's famous question of a hundred years ago: "What knowledge is of most worth?" To ask such a question, to use the answer as the basis of the curriculum, and to answer it as he did, and as many others subsequently have done, by the one word "Science" is to do a slight disservice to the cause of educational thinking.

The question assumes that education is essentially a process of acquiring information and that, if at any given moment, we can know what information is the most valuable, we should teach this in our schools. Most educational theorists, however, have agreed that knowledge is not primary in importance but is secondary to the skills and attitudes which may be built up in association with it. If, nevertheless, the answer, Science, means that it is most worthwhile to have as many people as possible thinking like scientists and acting in a scientific way, then it is rather more acceptable because it suggests a pattern of behaviour as a model for the educational enterprise.

To conceive of science in these terms and to make it the core of the curriculum implies a judgment of present-day culture, and an attempt to make explicit to those being educated what Bernal calls "the conscious expression of the task of human society."[15] Under this dispensation, "particular scientific disciplines; the dispassionate assembling of evidence, the means of dealing with multiple causation, each factor having a definite quantitative part to play in the final result; the general understanding of the elements of chance and statistical probability, will tend to become the background of every kind of human action."[16] This position, stated by a Marxian writer in the nineteen-thirties, was accepted by educators in the U.S.S.R.

[15] J. D. Bernal, *The Social Function of Science* (1939), p. 415.
[16] *Ibid.*, p. 412.

after a period of " luxuriant experiment "[17] in the nineteen-twenties. The new era, beginning in the early nineteen-thirties, in which as Ashby described it, " Russia has endowed science with the authority of a religion ",[18] was an implementing of the theory announced in the first flush of the revolution in 1918 that " the principle of productive labour should underlie the whole educational system : the teaching in the schools must bear a polytechnical character ".[19]

Polytechnization was the theoretical core, and with some changes of interpretation and varying fortune has remained so up to the present time. It has not always been implemented in the same way. It has been expressed in practice from time to time as socially useful work, or merely manual work, as the study of the sciences, or as social humanism, and there has been much animated discussion as to the appropriate emphasis that should be given to it in the schools. But the general tenor has always been clear that it should provide the children with an acquaintance with the scientific bases which underlie productive work and its relationship to collective Marxist society.

Science, taken in this way—in the sense that it embodies the fundamental outlook of society, furnishes the most urgent skills and provides a basis for the evaluation of human activities—has been the principal determinant in the minds of curriculum theorists in the U.S.S.R. during the last three decades.

A movement similar in principle but different in outcome has developed in the United States from the mid-thirties on to the present time. This took its main impetus from the experimental work done during the progress of the Eight Year Study on the secondary school curriculum organized by thirty-two schools and three hundred universities from 1933 to 1942.

A number of attempts were made to organize " common learning programmes " which would form a core of experiences providing for all children an understanding of the society in which they live and assisting to develop in them the knowledge, skills and attitudes felt to be appropriate to the nature of their culture.

The theory of the core curriculum which emerged from these attempts and its association with the Deweyan approach to education is reminiscent of Rein's ethical core of concentration. But, whereas Rein's pupils studied cultural values through the medium of already established subjects such as Literature and History, the modern approach is to devise a special subject-matter concerned with fundamental social values. The theory of the core curriculum owes much to the work of sociologists such as Linton and their analysis of the structure of human culture. In any particular society, they hold, it is possible to detect some elements universally distributed among the adult population ; these may be common methods of eating and dressing, the use of a common language, or the acceptance of common religious, political and economic beliefs. These generally accepted elements of a society's culture are referred to as " universals ". At the heart of the universals lies a common core of

[17] S. and B. Webb, *Soviet Communism* (1947 edition), p. 725.
[18] E. Ashby, *Scientist in Russia* (1947), p. 202.
[19] Quoted in S. and B. Webb, *op. cit.*, p. 725.

basic values or rules by which a people regulates its conduct. These are the normative elements which are seldom openly expressed, but which nevertheless provide society with its stability and unity.

These constitute the real subject-matter of the core curriculum which is a careful and deliberate attempt to make explicit and to examine critically the common moral content of the culture with the object of building common understandings between people.

The study of these core elements in the culture is organized around social problems or themes based upon the major considerations of life in the given society. This, it is held, is the material which all persons growing intelligently into a society should understand and evaluate. By studying these things together, by mutual criticism and interpersuasion, children will come to learn not only the skills of living happily in society, but also have at their command the tools through which they can create a better society.

" That a society ", write some of the leading exponents of the core curriculum, " needs people of many and diverse competencies no one would deny. It needs mathematicians, physical scientists and engineers. It needs people trained to solve their problems. However, those individuals who favour a core curriculum point out that the satisfaction of these societal needs is not sufficient. In addition, there are broad social problems involving an entire community, a region, a nation, or even peoples of the world. These are problems that do not grow out of individual needs and cannot be solved by individualized thinking—(but require instead) the development and training of individuals who can understand and deal with these problems involving groups of men . . . In its pure form the core curriculum, therefore, emphasizes a social-centered education ".[20]

The trend of theory in each of these two fields of education which we have briefly examined—methods of teaching and curriculum—is indicative of the movement of educational thought in general throughout this first fifty years of the twentieth century.

The early twentieth century witnessed a conflict of culture that touched all aspects of human affairs. An old civilization, wearying a little and slightly dubious of its gods, was shot through with new anticipations, with revolutions in art and politics, with fresh literary tastes and musical forms, developments in technology, and discoveries in medicine and science, producing a variety of moods, attitudes and uncertainties. In the field of formal education the conflict was most clearly to be seen in the clash of classical and modern studies for primacy in the secondary school curriculum. It was a clash whose rival claimants could not then be reconciled despite the valiant attempts of the Herbartians at a theory of concentration. In France the Ribot Commission sat and compromised with rival programmes co-existing within a single lycée ; in Prussia the Regulations of 1901 gave substance to three separate types of gymnasien with full and distinct courses ; in England the Board of

[20] Smith, Stanley and Shores, *op. cit.*, p. 316.

Education settled for the traditional classical approach in secondary schools and relegated modern studies largely to a different system of education; and in the United States the Committee of Ten also favoured the traditional curriculum, modified by an elective system which in no way helped to harmonize the divergent views.

The problem—how to integrate conflicting interests—dramatically posed by this collection of commissions and conferences at the beginning of the century—has become the leading problem for educators throughout our time.

Upon what basis could this be achieved? Only, surely, by a re-examination of the functions of education.

The view, enshrined recently in the English Education Act of 1944, that the aim of education is to enable an individual to develop as far as his age, abilities and aptitudes will permit, received support in the early decades from the Child Study movement and its striking discoveries of individual differences in capacity and attainments. This tended to acerbate the basic problem. A corrective, however, was at hand in the development of more integrative approaches by the psychologists who were more interested in social behaviour and typology. At the same time, in the inter-war period, the interest of political theorists and economists, turning to questions of social planning and collectivization, was reflected in the field of educational theory.

In Italy, Gentile dissolved the individual in the collective personality of the State, giving to education a unity and solidity which satisfied totalitarian minds. In the U.S.S.R., Makarenko found inspiration in what he described as "the deepest joy the world has to give—this feeling of interdependence, of the strength and flexibility of human relations, of the calm, vast power of the collective, vibrating in an atmosphere permeated with its own force".[21] Education should aim to discipline the individual to see the objects and achievements of the collective as his own, and to help the collective gradually widen its perspectives until they become those "of the whole Soviet Union itself".[22]

Education, as these theorists have worked upon it, has become more and more securely established not merely as a branch of social philosophy, but as a spearhead in the process of social reconstruction. In the English-speaking world the same trend has become apparent. Sir Fred Clarke and Karl Mannheim, in England, and John Dewey and his Experimentalist followers in the United States, each influential and widely read, have with increasing strength argued this case for education.

Three fundamental points they hold in common:

(1) The first is best expressed in Clarke's words: "No educational activity or research is adequate in the present stage of consciousness unless it is conceived in terms of a sociology of education . . . Society must be served, and education is there to provide for its cohesion and continuance".[23] Society

[21] A. S. Makarenko, *The Road to Life* (1951), Vol. 2, p. 340.
[22] *Ibid.*, Vol. 3, pp. 284–285.
[23] F. Clarke, *Education and Social Change: An English Interpretation* (1940), pp. 1, 67.

at large is busy " both recasting our educational system and at the same time rebuilding the fabric of our society " ;[24] the educator therefore must be keenly aware both of the social significance of his work, and of the social structures and pressures which he is called upon both to adjust and to manipulate.

(2) The second feature of their thought is the realization of the extent to which human behaviour is built up by social experience. What an individual is is no more and no less than a particular pattern of relationships within a society. His habits, his modes of thought, and his values are those which his social relations have created for him.

(3) The third is implied by the first two considerations. An educator's task in a technological society is to develop in his pupils the knowledge, attitudes and skills which will enable them all to share in the planning of the emerging social order and to forge the mechanisms which will maintain both freedom and efficiency.

What are the implications of this review for Australian education ? There are many, but three are particularly pertinent.

In the first place, we need a new orientation towards teaching. We need men and women who realize that their task is reconstructive rather than conservative, who are competent not only in handling and transmitting examinable bodies of knowledge in the established subjects, but who are also knowledgeable and experienced in the skills and techniques of discussion and group interpersuasion.

And secondly, we need to re-examine our school programmes continuously to assess and evaluate their connection with and contribution to the developing life of Australian society.

This suggests a third imperative need, that of a vast extension and acceleration of research into the relationship between education and the social structure and processes of our community. We are, at the moment, supremely ignorant of what Mannheim called environmental social psychology, unskilled in the techniques of understanding or of affecting human relationships, and even unaware of the significance of many of the social forces which shape the educational continuum in which we work.

There is a story about two English schoolboys who took a dislike to each other. The hatred grew more intense as the years passed. One entered the Royal Navy and finally became an admiral ; the other went into the Church and eventually was made a bishop. Years later they met on a London railway station. They had changed, of course, and the bishop had grown very plump, but they recognized each other. The bishop swept up to the admiral, who was resplendent in his uniform with medals and gold braid glittering all over him, and said : " Stationmaster, from which platform does the ten-five train leave for Oxford ? "

[24] Mr. George Tomlinson, Minister of Health, in a prefatory note in *School and Life : A first enquiry into the transition from school to independent life. Report of the Central Advisory Council for Education, England.*

The admiral, without hesitation, replied: "Platform five, Madam. But in your condition, should you be travelling?"

I doubt if our education here in its present condition could travel far. We do not know enough about the country it will have to negotiate; and we, the teachers, who will have to do the carrying and hauling, are at present neither equipped nor trained for the kind of journey that the trend of twentieth century thought would have us undertake.

AUSTRALASIAN MEDICAL PUBLISHING CO. LTD.
SEAMER AND ARUNDEL STS., GLEBE, SYDNEY