RECONSTRUCTION IN THE SECONDARY SCHOOL

BY

FRANK M. EARLE

B.Sc. (Leeds), M.Ed., D.Sc. (Manch.), F.B.Ps.S.

Principal, Kirkcaldy High School ; formerly Head of the Vocational and Educational Department of the National Institute of Industrial Psychology, and sometime Professor of Education in the Rhodes University College, Grahamstown, South Africa.

UNIVERSITY OF LONDON PRESS LTD.
MALHAM HOUSE, BICKLEY, KENT

RECONSTRUCTION IN THE SECONDARY SCHOOL

RECONSTRUCTION IN THE SECONDARY SCHOOL

BY

FRANK M. EARLE

B.Sc. (Leeds), M.Ed., D.Sc. (Manch.), F.B.Ps.S.

Principal, Kirkcaldy High School; formerly Head of the Vocational and Educational Department of the National Institute of Industrial Psychology, and sometime Professor of Education in the Rhodes University College, Grahamstown, South Africa.

UNIVERSITY OF LONDON PRESS LTD.
MALHAM HOUSE, BICKLEY, KENT

FIRST PRINTED 1944
REPRINTED . . . . *December* 1945

AGENTS OVERSEAS

AUSTRALIA AND NEW ZEALAND
W. S. SMART, P.O. Box 120 C.C., SYDNEY, N.S.W.

CANADA: CLARKE, IRWIN & Co., Ltd.
480-486 University Avenue, TORONTO.

INDIA: LONGMANS, GREEN & Co., Ltd.
BOMBAY, CALCUTTA, MADRAS.

SOUTH AFRICA
H. B. TIMMINS, P.O. Box 94, CAPE TOWN.

THIS BOOK IS PRODUCED
IN COMPLETE CONFORMITY WITH THE
AUTHORIZED ECONOMY STANDARDS

Printed in Great Britain for the UNIVERSITY OF LONDON PRESS, LTD.,
by HAZELL, WATSON AND VINEY, LTD., London and Aylesbury.

PREFACE

THIS book was planned and half of it was written during 1938-1939, when the results of the use of my Tests of Ability for Secondary Courses were beginning to accumulate, and when, too, the appointed day for the raising of the school-leaving age to fifteen having been fixed in Scotland for September 1st, 1939, the problems connected therewith were engaging my attention.

It was completed in 1942 and was in the publishers' hands before the numerous reports on Educational Reconstruction began to appear. Indeed, the Government's White Paper and the Reports of the Norwood Committee and of the Educational Institute of Scotland (*The Scottish School*) were published while the book was passing through the proof stages.

This, I trust, will explain the absence of references to these and to other contemporary documents. If the views expressed here appear similar to those of others, it is only because many different minds have reached the same conclusions in spite of their different lines of approach. Nevertheless, I have reason to believe that the reader will find in these pages a severely practical discussion which translates the general principles now finding universal acceptance into the detailed procedures of the classroom and the school. These should be of interest to all —parents, teachers, employers and officials—who will eventually be responsible for carrying out together the reconstruction of secondary education, and without whose complete co-operation progress will be impossible.

I take this opportunity of expressing my indebtedness to those members of my profession who, whether as assistants or as heads of schools, have provided me with so much valuable data. In particular I owe much to the staff of the Education Officer of the City of Birmingham, and to the staff of Kirkcaldy High School. The Director of the Scottish Council for Research in Education and his secretarial assistant have given me indispensable help with the proofs.

FRANK M. EARLE.

HIGH SCHOOL,
KIRKCALDY,
August 1943.

CONTENTS

APPENDICES

CHAPTER I

INTRODUCTION: A 'NEW ORDER' IN EDUCATION

MANY a philosopher, seeking for Truth, must have longed to escape from the busy stream of everyday life into a quiet backwater—a library or a monastery—where reflection and contemplation might produce their precious fruits unimpaired by the strife and clamour of the world of action. And, doubtless, many a schoolmaster must have sighed for that cloistered seclusion in which "this our life, exempt from public haunt, finds tongues in trees, books in the running brooks, sermons in stones, and good in everything"[1]—the ideal milieu for his professional labours.

But such withdrawal can be carried too far, and the educationist, for one, cannot afford to lose touch with practical affairs. He must take account of the problems of industry and commerce, of politics, economics and civics, for without reference to these his major activities become meaningless; and, as the world into which his pupils are presently to be absorbed is in a constant state of flux, he can no longer depend for his guiding principles upon custom and tradition.

It is true that the problems of educating young people in the present century are fundamentally similar to those of previous centuries, but they are vastly different in detail and in setting; and while the recorded experience of the schoolmasters of bygone days has its place in our own philosophy of education, enabling us to see our problems in truer perspective, it has little direct contribution to make to their solution. We may sympathetically approve the aims and the methods of Vittorino da Feltre and other Humanist educators; we may gain enlightenment and even inspiration from the writings of Quintilian, Montaigne, Milton, Locke and others; we may condemn the practices so vividly caricatured in Mr. Squeers's notorious establishment at Dotheboys Hall, or typified in Fagin's school for pickpockets where vocational selection and vocational training were both effectively applied. Yet, as the educators of today, we have also to recognise that the situations with which we have to deal were unknown to our predecessors and that the procedures which were successfully used by them have ceased to be of the same value to us.

[1] *As You Like It*, Act II, Sc. 1.

We must not lightly discard what is valuable in our educational heritage; nevertheless, in dealing with current problems a new outlook is required and new methods must be sought, devised and applied. It is certain that the age of compulsory attendance at school will eventually be raised and that the secondary school will then have to deal for a longer period with young people for whom many of the present procedures of education were never intended and for whom they have already been shown to be unsuitable.

New aims, new procedures, new methods—what form will these take? Shall we be able to discard the static formalism of our classroom activities and make 'schooling' a living, dynamic force, as diverse in its forms and modes of expression as are the individuals for whom it is provided? Shall we, in our day, find "tongues in trees" and "books in the running brooks," or shall we be for ever tied to the printed page and to the written examination? Shall we continue to evaluate the educative process by certificates and by vocational success, or shall we seek for a greater enrichment of personality and a higher ideal of social duty and of Christian service?

These are vital questions, to which *ideal* answers are being shaped in many minds. But there is a wide gulf between the imagining of the idealist and the practical action into which it has to be transformed, and, before any progress can be made, these two aspects must be effectively co-ordinated. The present work is an attempt to do this for secondary education, to define some of its problems and to suggest the directions in which, in the light of our present knowledge, we may most profitably seek their solution. These suggestions may not be generally acceptable, but, even if they are, it must be recognised that the active co-operation of all concerned—Education Committees, employers, parents, teachers—is required to make them effective.

A school, any school, may be defined as a group or an association of individuals, old or young, experienced or inexperienced, whose primary purpose is the active and systematic participation in educative activities which are suitable to their abilities and interests. The members of this group may never become fully aware of the ultimate effects of their activity upon their own physical, mental or moral qualities and attributes; but they must be aware of, as well as keenly interested in, the immediate purpose of this activity, whether it be to make a basket (thereby developing and exhibiting their manipulative skill), to solve a quadratic equation (thereby demonstrating their

mathematical ability and knowledge) or to act in a play (thus expressing their natural or cultivated powers of observation and mimicry). If they are not interested, no educative activity can occur, and the group, whatever else it may be, is not a school. This is a basic fact of some importance at all ages, but especially at fourteen, fifteen and sixteen.

Moreover, in addition to the consciousness of purpose, there should also be the realisation of membership of, or partnership in, the joint activities of the group. Such realisation is difficult when the group becomes too large, but it can be fostered and developed by the enthusiasm of a director, an organiser, a leader, a teacher, someone who is aware of the purposes to be served by the group activities and whose duty is to direct them towards the desired goals. In these joint activities the attitude of the individual member to the activities of the other members and to the leader or teacher is as important as are the mainsprings of his own activity.

Sometimes the rôle of the pupils, and especially of older ones, may become too passive or too receptive, but it can be, and with younger children ought always to be, an active, constructive one, to which books and apparatus, tools and materials, workrooms, laboratories, playing-fields and gardens all contribute. It is difficult to conceive of creative activity without equipment and apparatus, nevertheless the basic relationship between a teacher and a pupil is not in itself dependent upon these adjuncts, nor even upon buildings; we remember that Jesus, Socrates and others have taught by the wayside or wherever their disciples gathered together. Indeed, this thought suggests that our ideal school should never be confined to one place or to one group of buildings, but should be capable of transference from town to country, from field to forest, from workshop to recreation-room, according to need. A school can remain an organised community for social and other group influences even when its members are variously distributed for instruction or for other purposes. This is another basic fact which must be borne in mind in connection with the specialised instruction of young people at fifteen or sixteen.

Again, the distinctive character associated with any established school does not spring from the venerable, ivy-clad buildings which it may have inherited, nor from the beauty of their adornment, nor from the excellence of their equipment, but from the mental and spiritual influences which have been exerted upon each member by the collective activities of the groups of individuals who have shared them with him, and

especially of the leaders and teachers who directed those activities. Arnold's influence at Rugby, like that of many another teacher, lived on in the minds and in the lives of those who experienced it.

It is necessary to emphasise this interaction between the individuals of a group, this impact of mind upon mind and of spirit upon spirit, because the administrative side of education, in its preoccupation with buildings, rooms, equipment, books, classes, attendances, promotions, examinations, marks and results, seems to undervalue this supremely important aspect. No 'New Order' in education will be any better than the 'Old Order' if it shows a similar preoccupation; and the raising of the school-leaving age to fifteen or sixteen will not achieve the results we desire unless we constantly remember this further basic fact.

Many head masters have found it difficult to give adequate time and thought to the fullest development of the spiritual influences of the school because they have been too much absorbed in the administrative details demanded by the complexities of our modern school systems. For them, the direct and continuous personal association with the more mature pupils has become impossible, the essential study of each separate member of a group, which is antecedent to every really educative group enterprise, has been subordinated to the compilation of statistics about their collective activities, while the close personal relationship of master and disciple has been replaced, to a considerable extent, by typewritten notices and printed assignments. Even the statistics are concerned more with examinations than with the welfare of individual pupils.

The undue importance attaching to examinations has, perhaps, been unavoidable, especially as they seem to provide some objective measure of the efficiency of a school's activities. But the number of certificates gained by the members of a school group is, in itself, a quite meaningless statistic; it is a number which requires to be interpreted in relation to the number of pupils preparing for examination, their ability to learn, their desire to learn, the time devoted by them to examination work and to other work, their home circumstances, their opportunities for independent study, as well as to that complicated mixture of incentives, aims, encouragements, trials and disappointments which is characteristic of the corporate life of a group. Even then, the statistic gives no information about the attitudes of mind, the modes of thought, the ideals of conduct, the conceptions of duty and all those intangible, yet extremely valu-

able, influences which come from full and satisfying activities in a group where sympathy and effective co-operation replace drive and compulsion.

To secure sympathy and co-operation we require a group which is neither too large (for then the individual is lost), nor too heterogeneous (for then the diverse individual characteristics militate against harmonious co-operation). Large groups require to be divided into smaller, more homogeneous groups, and it may be difficult to decide how this may best be done. Should school groups preferably consist of those who are equal in intellect, in attainment or in any other attribute? If not, how diverse should they be in regard to the age, abilities, interest, talents and temperaments of their members? Should a school, by including all types and classes of society, represent the external world in miniature, or should it be selective, concerning itself only with persons from one particular section of that society? In which of these will there be secured the best and most fruitful interactions among the members?

An attempt to answer these questions will be found in subsequent chapters; but if we seek for guidance in the current practices of today, we find a strange and bewildering diversity of opinion. The Public Schools, the Grammar Schools, the Municipal and County Secondary Schools, the Commercial, Technical and Trade Schools, the Central and Senior Schools, with their many variants, express views which it is extremely hard to reconcile. There do not seem to be any universally accepted aims and methods; on the contrary, different needs have been satisfied in different ways by people who have shaped and moulded scholastic endeavour to their own ideas through many decades of social development and change.

This moulding process can never cease; any association of persons worthy of being called a 'school' is a *living* thing, depending for its vitality upon the inspiration it both creates for, and draws from, the community which it serves; and as the needs of that community change, so must the aims and methods of the school.

This is especially true of the secondary school, which, during the last twenty-five years, as an organising influence in the education of the adolescent, has considerably expanded its services to the community. This process must continue with greater speed and with a more exact regard for individual needs. The secondary school of tomorrow must become 'universal'; instead of limiting its courses of instruction to the highly formal and abstract treatment of those subjects

which, following tradition, it was inclined to consider necessary for *all* educated men and women, it must extend the range of its pursuits, even more than it is doing at present, to include the active interests of the less intellectually gifted members of the community. Only so can it become a source from which *every* pupil can draw inspiration and guidance as his personality matures.

This is no light undertaking, whether a school be large or small; every school will have its own peculiar problems according to the nature of the individuals who compose it. In dealing with these, the relationship between the master and the disciple, between the teacher and the pupil, which is, first and foremost, a personal link between two human beings, must be maintained on as intimate and fruitful a plane as possible, even when it becomes profoundly modified in the group activities by the composition of the group and by the relations existing between its members. Hence one of our practical problems is to determine how far the organised activities of a group should be related to the needs of the individual *per se,* or to his needs as a member of the group, for these are not always effectively served by the same procedure. To what extent should the emphasis be placed upon *individual* learning, upon *individual* skill or upon *group* influences such as are derived from co-operative activities and from the subordination of individual interests to the effective promotion of a communal enterprise?

If we were concerned only with such limited aims as the imparting of information or the acquisition of a skill, we might be inclined to stress the value of individual tuition and seek for an organisation which would promote the most rapid individual progress. But our aims are much broader; while we do want effective and rapid learning, we want other things as well. The effects of grouping are far-reaching, but they can properly be assessed only in terms of their influence on the individual. Modern research has disclosed the nature and the extent of individual differences in learning capacity. The clearer recognition of these differences compels us to examine our methods of instruction—both group and individual—with keener criticism, recognising throughout that the personal links between the teacher and his pupils become transformed by the relations existing between the members of the group and each other. The simple bi-polar, teacher-pupil relationship of private tutoring becomes the complex many-sided relationship of a social group, modified and conditioned by large differences in the learning capacity of its members.

Explicit reference to this aspect of 'group' education will not be made again. It will be assumed that subsequent suggestions for the better education of the individual pupil, whether alone or with others, imply a recognition of these basic facts. Consequently, the main corner-stone of our new edifice will be the study, by the most exact methods available, of the talents and temperaments of the individual members of the school groups with which we have to deal.

For those who work in secondary schools the problems are twofold, being concerned, first, with each pupil's fitness to attempt a selected course of advanced instruction, and, second, with the *results of that attempt* in so far as they affect his subsequent choice of a career and his ability to undertake the preparation necessary for it. The usual procedure in ability measurement has been to study the record of the candidate's achievements and to draw from it inferences as to his probable efficiency in dealing with a new problem or in acquiring a new skill. The method is sound enough, if properly used, but it could often be improved if we knew the significance of the individual's failures and were not limited to information about *some* of his successes. Even in regard to these we have been mainly influenced by the fact of success instead of examining the processes by which it was achieved, and especially the abilities and attainments underlying them.

Now, the abilities which are necessary for success in school activities, though as yet not completely understood by those most concerned with them, are undoubtedly closely related to those which promote success in certain types of vocation. Whenever they are not, we ought to know how and why they are different, and this requires a more exact analysis of the growth or maturing of abilities of all kinds than is customarily undertaken.[1] Because of this intimate connection between the abilities revealed in school and the abilities required in occupations, there should be the most complete co-ordination of the aims and methods of education at the two main stages of adolescent development.

At the first stage, from eleven to sixteen, the schoolmaster's aim should be to ascertain how individual differences in ability affect such matters as the classification of pupils, the choice of appropriate media of instruction, the degree of difficulty or complexity of the tasks to be attempted, the best methods of instruction, the special methods to overcome individual difficulties, and the like. It will generally be found that the best

[1] This receives attention in Chapters II and III.

possible answers for the pupils studied separately are also the best for the group and for the school. Moreover, a successful solution at this point is not only an important step towards the simplification of the later problem of the choice of a career, but also yields valuable results in the subsequent social orientation and adjustment of the individual. In short, a misfit at this stage is very likely to result in a misfit later.

At the second stage from sixteen onwards, we are concerned with the problems of transition from youth to manhood. The adolescent has to be absorbed into society as a working member, and the process of adjustment may be difficult and prolonged. Such natural aptitude as the individual possesses for the work he now undertakes must inevitably affect his performance in it and, therefore, must determine the extent to which the quality of his work pleases his instructors, his supervisors or his employers. Moreover, the attitude which he adopts on entering employment is also important, and the school may have a great deal to do with developing in him a sound attitude, through which his work will be competently done to the satisfaction of both himself and his employer.

The secondary school cannot afford to remain indifferent to the problems encountered at this stage by those who would employ its former pupils. Whenever it is necessary to estimate the extent to which ability and character influence the success of an individual in any particular task or group of tasks, it becomes increasingly difficult, as he gets older, to distinguish between the effects of natural aptitude and the effects of acquired experience, especially when these become affected, about sixteen, by temperamental disturbances or by hesitancy and temporary loss of confidence. Yet a separation must always be attempted if a decision is to be reached The realisation of this leads to the question whether or not it will be profitable to refer back to the earlier stages, where the differences might be more easily observed, and where, if the school knew what was required of it, there might also be a more accurate assessment of the youth's characteristic qualities during the processes of recording.

Recent research suggests that the inborn qualities upon which the development of some abilities undoubtedly depends are best observed and measured at the earlier stages of growth, whereas the abilities which express acquired knowledge and skill in high degree are more accurately measured at later stages. It should be noted also, that, for some purposes, the detailed study of an individual is likely to be more fruitful

after certain definite characteristics have developed. A youth of seventeen or eighteen often possesses a characteristic personality which is attractive to a prospective employer, his inborn qualities having matured into recognisable and more or less permanent traits. By contrast, a boy of fourteen or fifteen presents a relatively immature and undeveloped personality, for which the constraint of his home and school environment, as well as his limited experience, is often responsible. But as the boy approaches the adult stage his personality, despite these restraints, becomes more and more representative of his real self, and, therefore, if properly observed, ought to provide a much truer indication of what he will be when fully grown than any opinion formed earlier could have done. In these respects the later study of ability for occupation would appear to be easier than the earlier study of ability for education, since the field of opportunity has become less extensive and problems of choice have become more specific.

Yet, both studies are alike in that they are equally inspired by the belief that the talents a man has inherited from his parents and ancestors, the education and training he has received during his early years, and the traits of temperament and character he has developed during childhood and adolescence, all contribute in various complex ways to his achievements. If we can discover soon enough how an individual's talents and temperament are growing, we ought to be able to decide in advance what will be the most suitable media for their further development and then so to direct his choice of studies that, in due course, we may help him to choose a congenial occupation. This is not the end of the story, since his education for life and for citizenship is by no means complete, but it may mark the extent to which the secondary school can, in ordinary circumstances, take a leading part in shaping and moulding the final product. Moreover, it emphasises the fact that an adequate study of the problems of the secondary school of today must take us a considerable distance from its walls; and that we have to consider, not only what the child is when he comes to us, but also what is to become of him when he leaves us. Whatever we succeed in doing for him or with him, our contribution, good or bad, remains one of the principal formative influences of this stage of his development.

Hence, we cannot ignore the social and economic changes taking place today, for they bring us into more direct contact with the occupational problems of our young people. Hitherto,

the large majority of secondary-school pupils have postponed the actual *choosing* of a career, though not the *thought* of it, until they have come to the end of their school studies. For the few, the more highly gifted, this may not create any serious difficulty, either of choice or of further preparation, but for the many it is certain that this postponement makes the choice more difficult than it should be, especially when the course of study previously followed has been inappropriate for them. It will be part of our task to consider how this defect may be remedied. Too sharp a distinction between the 'education' given in the school and the 'training' given in the occupation creates in the adolescent an attitude of mind which intensifies the difficulties confronting him. Reconciliation of the aims and methods of these two stages can best be achieved during adolescence, by interpreting the aims of both in a more liberal manner and by allowing the methods of each to influence the other.[1]

It will be assumed that the reader is familiar with the progress that has been made in the general technique of ability measurement during the last twenty-five years. Nevertheless, it seems desirable to refer briefly to one or two important principles which will be found extensively applied in the subsequent discussion. Those who require a more exhaustive treatment are referred to books which deal especially with these topics.[2]

The psychologist recognises that every mental process, be it direct perception (meaning-getting), simple recall (memory), re-combination of experience (imagination) or analysis of experience (reasoning), is accompanied by the activity of some part of the nervous system, and this activity, in itself, may produce a modification, temporary or permanent, in the functioning, if not in the structure, of that system. It matters not whether he calls the resultant *effects* 'apperception masses,' 'complexes' or simply 'ideas'; he realises that environment, acting through the receptor and effector mechanisms upon the higher centres of the nervous system, may considerably increase their power to act appropriately; so that the final flowering is not simply an expression of the innate endowment of the individual (as exhibited in the *quality* of his mental processes), but the combined expression of both endowment and environment. The difficulty is to say precisely at what point any inefficiency or

[1] Some suggestions bearing on this question will be found in Chapters V to VIII.

[2] E.g. Vernon, *The Measurement of Abilities* (Univ. of London Press, Ltd.).