

THE RISE AND PROGRESS OF THE DALTON PLAN

REFLECTIONS AND OPINIONS AFTER MORE THAN
THREE YEARS' WORKING OF THE PLAN

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TO
MISS HELEN PARKHURST
AND
MISS BELLE RENNIE

PREFACE

THE Dalton Plan has had a profound effect on English education, and the enthusiasm with which Miss Helen Parkhurst's solution of the difficulty of securing individual work while retaining many of the advantages of the class system has been received is unmistakable evidence of the value of the principles on which the Plan is based.

This book will prove to be a very valuable and welcome addition to the literature on the subject.

Mr. Lynch has had a wide experience of the working of the Plan in an elementary school under exceptional difficulties. He has triumphed over all obstacles, and has obtained very considerable success as a consequence. The story of his achievement is told in a simple manner, with no trace of exaggeration. In fact, in many ways, he has underestimated the value of his work.

The question of examinations is dealt with in this book in an almost unduly temperate manner. A much more generous conclusion might have been reached even on the statistics given in the chapter on "Tests of the Educational Efficiency of the Plan." Parents will, however, fully realise that even from the examination point of view, they

certainly have nothing to fear under the Dalton Plan.

The chapters II, III, and VII are particularly good. In chapter VIII the Foreword to Mr. Shann's booklet, by the Vice-Principal of the Training College at Melbourne, merits special mention. It gives an unusually concise and carefully reasoned statement of the educational principles involved in the Dalton Plan. In the next edition, it would be well to amplify the account of the whole-hearted adoption of the Plan in China and Japan.

In any account of the remarkable and rapid success of the movement in England, reference should be made to the extraordinary efficiency of the Dalton Association under the able direction of the Hon. Secretary, Miss Belle Rennie, the importance of whose services to modern education cannot be over-estimated.

C. W. KIMMINS.

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FOREWORD

THE present volume is no substitute for the author's previous work on *Individual Work and the Dalton Plan*, but is supplementary to it. Like its predecessor it makes no claim to be authoritative. During the course of his experiment, now covering more than three years, the author has been the recipient of a mass of correspondence from all parts of the world, and has, besides, come in close contact, at the school, with hundreds of visitors from this and other lands, who wished to see the Plan in operation. Both correspondents and visitors have asked innumerable questions, the answers to which the author has done his best, within the limitations of time and opportunity, to supply. These questions, most of them of a general, though not unimportant nature, have a very wide interest. It is the belief the author has that such answers to these questions as he was able to give, together with such additional information as has come to him through experience and otherwise, might be of service to the much wider circle of those who are experimenting on similar lines, that he offers the present volume. He has no other excuse than the desire to be helpful.

It may be of interest to readers to know that

the author's school has been visited by the Inspectors of the Board, and whilst no definite opinion was expressed on the Dalton Plan itself—this was not expected, nor perhaps desirable—the Local Education Authority, to whom, in the first place, the Board's report was submitted, sent a letter of congratulation to the Staff of the school, and gave permission for the experiment to continue.

The author desires once again to place on record his keen appreciation of the devotion and co-operation of the Staff with whom he works—the personnel of which has changed considerably since the experiment began—and to express his conviction that, in whatever success has come to the school, they may justly claim the greater share.

THE RISE AND PROGRESS OF THE DALTON PLAN

CHAPTER I

THE CASE FOR THE DALTON PLAN RE-STATED

It is just a little over a year since the present writer published an account of his experimental work with the Dalton Plan which was being carried out at the West Green School, Tottenham. The account was a more or less detailed description of the inception of the Plan in his school in April, 1921, and for twelve months afterwards. That account found great acceptance among teachers and others, both at home and abroad, and this acceptance has encouraged the writer to venture further into the sphere of publication in order to put before those interested some further reflections which have come to him during the three years and more which have elapsed since the experiment was started, and to supply some omissions which were made in the previous work.

It may not be out of place to make at once some general observations on the experiment itself, and

also, in a later chapter, to refer to the astonishing way in which, in a comparatively short time, the Plan has made its way in this and other countries, in spite of the curious fact that the Plan is not, as yet, in all quarters, fully understood.

Having experimented with the Plan fully for three years, and, partially, for longer than that period, the present writer sees no reason to change the opinions regarding it which he has previously expressed.* On the contrary, he is more convinced than ever that the plan in theory combines sound educational truth, and, in practice works smoothly and easily and maintains a good standard of work. Alterations and modifications have had to be made during the course of the experiment to meet the changing circumstances as they arose in the school, but these alterations and modifications have in no sense departed from the underlying principles of the Plan which, after all, are the vitalising and energising things that really matter. These modifications will be referred to in detail as the writer proceeds. The advantages claimed for the Plan still remain—and so, to be quite frank, do some of the difficulties—but the all-round gain has been very great.

What, then, are the main advantages claimed for the Plan? In the first place, the Plan claims to provide a greater amount of freedom for each individual child than the old class method provides, and is thus a reaction against the rigidity and passivity of the ordinary classroom. It does not, however, claim that every child is free to do as he

* *Individual Work and the Dalton Plan*, A. J. Lynch (Geo. Philip & Son).

likes, irrespective of the rights of others, or of the work to be done. But it does claim that each child be allowed, in a very real sense, freedom to choose his work, the order in which the subjects are taken, the time, within bounds, at which he will do it, and, to a limited extent—limited only by the accommodation of the school building—the conditions under which the work is to be done. No supporter of the Dalton Plan is unmindful of the fact that in many schools, long before the Dalton Plan, as a Plan, was heard of, opportunities for the exercise of freedom, in many directions, were, and still are, provided for children. This is especially true of the rural schools of this country. The tendency, for some years, has been away from the stereotyped conventions of traditional class teaching and towards the things for which the Dalton Plan stands. What the Dalton Plan does is to turn that tendency, by new suggestions as to the reorganisation of schools, into a method that will make greater freedom on the part of the child not a spasmodic and accidental thing, but a regular and usual thing; to make it, in fact, not a thing bestowed on occasion on the child, but an ordinary and unconscious result of the organisation that always follows where the Dalton Plan is the basis of that organisation. The Daltonian does not say to John Smith, or to Willie Brown, that on Tuesday afternoon, or on Thursday morning, each shall have a greater measure of freedom given to him on those days; what he does is to reorganise his school in such a way that for most of the school time available, and for all subjects that can be treated in that way, freedom is the natural accompaniment of the work, and is the

atmosphere in which that work is performed. It is necessary, however, to point out in what that freedom consists. That will be done later. The point to stress here is that freedom is not something that is superimposed on the child at certain convenient (sometimes inconvenient) times of the day, but something that is part and parcel of the child's school life. The whole atmosphere in which the work is done is changed.

Before one can say in what the freedom really consists, it is necessary to recall the way in which the Plan operates. Classrooms give place to subject rooms. It is recognised that this particular arrangement cannot be brought about in all schools—the buildings themselves make that impossible. Where, however, this cannot be done, it is often possible, and, indeed, it is very frequently done, to create "subject blocks" or "subject corners" by providing large tables, or by putting desks together, in an ordinary classroom, or in a small schoolroom. These blocks or corners take the place of subject rooms, and children sit in the corners at the tables, or in the blocks of desks. The most common way is to establish four subject tables in a room. When this happens, and children are set to work, there may be set up at once a freedom of movement (from table to table, block to block, or, in the larger case, room to room), a freedom of choice of subject to be worked, and freedom as to the time of working the subject. These freedoms cannot, of course, be separated; they are really one and the same thing. In addition, there is the freedom to consult the teacher if and when difficulties arise, freedom to handle and consult books, freedom to discuss with one's friends.

All these register a distinct advance in school organisation. It must be pointed out, however, that the Dalton Plan organisation cannot be made to cover all the subjects of the curriculum—there are some subjects, like Physical Exercises, which do not lend themselves to such treatment. But when full allowance is made for the subjects that cannot be so treated, the fact remains that most school subjects may be worked advantageously under this changed method of organising a school.

It will be apparent to the reader that when only one subject (or perhaps two) is worked in one room, with no interchange to other rooms, what is usually understood as the Dalton Plan cannot be made to apply. It is true there may be a certain amount of freedom of choice within the subject, and there may be freedom as to the time when the subject may be taken. This is what is referred to later as Individual work. But that larger freedom which is implied in what has been said earlier is lacking. That larger freedom comes with the organisation, where possible, of subject rooms, and in no other way.

In the second place, the Plan claims that a child should be given a greater share in his own education by being allowed to do more for himself. This is what is commonly known as Individual Work. No phrase, however, in educational theory, seems to be in greater danger of being misunderstood. The failure to grasp what it really means has led to the rather futile discussions as to whether the teacher can be wholly dispensed with, or whether class teaching is, or is not, doomed, or whether, at last, the knell of class teaching has not already been

rung. No discussion could be more fruitless. The true teacher will always be indispensable. It is not a question of Learning *versus* Teaching—much more is involved than that, although if that, indeed, were the only problem, it could be solved by a careful adjustment of the claims of each—that is, of individual work and class teaching—when the arrangements for teaching any subject were being considered by the staff. But that is not the whole matter.

One of the complaints against the old methods is that teaching by the teacher was the be-all and the end-all of the work. Whatever the subject taken it was nearly always the teacher who predominated. The child was, or was expected to be, the passive listener. The chances were that he was nothing of the kind, but while benevolently beaming on his teacher, in reality was bored. The whole class being regarded as the teaching unit, the danger was the danger of uniformity. The children were bunched and turned out according to plan—and the plan was not wholesome.

The reaction against this kind of thing led many to imagine that the cure was to be found in the simple expedient of giving the child something to do—mere occupation. To a certain degree this was a sound policy to adopt. It was individual work. But, on reflection, it will be agreed that merely giving the child something to do is only repeating, in a similar way, though for quite other reasons, what was done on hundreds of occasions under the old methods. Giving a child four sums to work, or a composition to write, may be quite rightly described as giving him individual work. If one may be permitted to say so, it is rather this

aspect of the Dalton Plan that pushes itself into prominence with many teachers, and in many of the advertisements of school publishers. It would be a pity if this view of so fine an educational maxim were allowed to persist without comment.

No true Daltonian accepts this view as the full one. What he understands by individual work, and what Miss Parkhurst herself wishes to be understood by that term, is involved in the idea of freedom which is discussed above. Individual work is appropriate only when the conditions of organisation of a school are such, that in carrying out his work for himself, a child is able, because he has the greater opportunity to do so, to express his Individuality. "The real business of education," says Dr. Nunn, "is to supply the conditions under which children may best be stimulated and guided each to the fulfilment of his own individuality."* It is in the greater opportunity given for the expression of personality that organisation on Dalton Plan lines differs so radically from the old methods. Individual work, therefore, needs to deal, where possible, with those subjects which allow of greater self-expression and call into play creative instincts. Such subjects are Drawing and English (including Literature) and, perhaps, though to a lesser extent, History, Geography, and Science.

A word should be said about individuality and personality as distinct from what is known as formal individualism. Whilst the ultimate aim of individual work should be the expression of individuality, it is claimed that, under the organisation of the

* See *Education: Its Data and First Principles*, T. Percy Nunn, M.A., D.Sc.

Dalton Plan, individuality finds its highest expression in the Social group. Individuality in the creative sense revealed through work done in connection with the subjects of the curriculum is not, after all, quite the same thing as individuality which is allowed to express itself through actual living, or in conditions that are as near actual living as possible. The latter is a distinct advance on the former. The Social group, therefore, also plays an important part in the working of the Dalton Plan. It will be readily observed, then, that merely giving a child something to do is but one, and perhaps a very small, part of the idea of individual work. The essential thing, in this connection, is not only that such work be given as will enable a child to reveal himself; but it should be given in such conditions as will also enable him to realise himself in such a way as to allow him to contribute his quota to the Social group.

It is this view of individual work that leads, in the third place, to the claim that the Dalton Plan implies a fresh orientation in the organisation of schools, in that it deliberately encourages, not only the Social group, but also the interaction of social groups. This is best understood from the process pointed out above, where the classroom, during Dalton time, becomes the subject room. Assume, for a moment, that, in a school, boys from the age of about ten upwards are working on the Dalton Plan. It will be plain that, irrespective of age, or standard, boys desiring to work at any particular subject—History, for example—will go to the History room. The spectacle presented in that room is one of an apparent motley group of boys,

of ages varying from ten upwards, intent on studying History. There, at any rate, is a social group, the common aim of which is a purposeful one. Within this group will be other smaller groups whose common aims vary, but one of which might be to work at the same stage of the subject set for study. Within that larger group, therefore, are numbers of smaller groups whose objectives are different but whose ultimate aims are purposeful. These groups vary from hour to hour and from day to day, and it is this variation of the groups, and their interaction on one another, and on the members of these groups themselves, that provide the variety and sociability that form, at once, a contrast with, and a distinct advance on, the rigidity of the old class system, and form a parallel with the social life of the outside world which the child will, in due time, have to encounter.*

These, then, are the claims made for any organisation laid out on the lines of the Dalton Plan. In the main, they are social and human, and, far from offering a rebuke to the older methods of organisation, are merely the stabilisation and extension of the best features with a new end in view of the schools of the older type. It cannot be stated too often that the Dalton Plan is not advocated solely as a means of educational efficiency, in the academic sense, but as a method of school organisation intended to foster greater human

* An interesting article (one of a series) on "Individual Work" by the Rev. the Hon. Edward Lyttelton, D.D., appeared in *The Reader* (the organ of the National Home Reading Union) for January, 1926. What is claimed above, and more, is clearly set out by the writer.

activity and to provide, in a new atmosphere, such opportunities as will allow children more freely to express themselves, and to enable them to realise their own value as social units.

Dr. O'Brien Harris, in her valuable contribution to educational literature, *Towards Freedom*, says: "The plan is meant to be not a new school method but a way of life based on the human life of the world rather than on the conventions of traditional school life." *

But although the Dalton Plan is not advocated primarily from an academic point of view, and, assuming for the moment that a greater social efficiency, with a corresponding reaction against the old methods of regimenting children, is the main claim of Dalton Plan organisation, it is still, in the writer's opinion, necessary to show that the new organisation on social lines, which involves greater freedom, greater self-dependence, and greater mutual aid, does not in fact impair the ordinary academic work of any school, or lessen those scholastic results—particularly examination results—so much prized by parents, which are included (but by no means comprise the whole) in the phrase "educational efficiency." Having adopted the Dalton Plan for more than three years, the present writer feels justified in saying that at no single moment, in the course of the experiment, has he been conscious of any general slackening of effort on the part of the pupils, or of a diminution of the quantity, or quality, of the work done. Neither have the masters expressed any desire to revert to traditional methods. On the contrary, he has been struck, in some sub-

* See *Towards Freedom*, p. 144, Dr. O'Brien Harris.

jects, particularly English, by the great advance made by both backward and bright children alike. And while it is pre-eminently true of some subjects, it is also true that no subject has shown results entirely inferior to those obtained under the old system. It is notoriously difficult to produce reliable proofs of statements of this kind, because standards vary from place to place, and even among teachers themselves. But such proofs as it is possible to give will be given in another chapter.

Meanwhile, it may be as well to point to one or two things that the Dalton Plan does not claim for itself. It does not, for example, claim to turn a poor school into a good one; nor does it claim to alter the character of the teacher, though it frequently compels a change in his attitude to his charges. A school, housed in a poor building, with poor equipment, a weak staff, and with restricted outlook and vision, cannot hope by a mere adoption of the Dalton Plan machinery by those who are unconvinced of its power and spirit, suddenly, by this very act, to become an efficient school. Obviously much more is needed than a change in school organisation from one system to another. While the house and its contents and its outlook remain the same, it is idle to suppose that merely shifting the furniture round will work a miracle. There are on record, however, cases of schools where the staff and equipment were all that could be desired, but where the outlook was blurred and what is called the "tone" suffered considerably, but where the adoption of the Dalton Plan organisation brought into play just those elements that were needed to change for the better the whole tone and outlook of

the place. Other things being equal, it is true to say that the Dalton organisation greatly assists tone and discipline, but, generally speaking, it is futile to suppose that a mere change of organisation, without other essential accompaniments of ordinary school routine, such as equipment, staff, and so on, is going to effect a transformation from a poor type to a good type of school. Supporters of the Dalton Plan make no such claim.

But once the Dalton Plan is put into operation by those who believe firmly in its underlying principles, whatever the particular nature of its application, certain results will follow almost inevitably as direct consequences of the application of those principles. If greater freedom, self-reliance, and sociability are allowed, it follows that pupils will begin to work along lines of their interests, and at their own rate of speed. No Daltonian, however, imagines that every child will like to work the same subjects at the same time (that children are usually expected to do this is a complaint against the old class method), or that all children can be got to put the same amount of effort into their work. It is quite possible that some children may be inspired, others cajoled, while others, again, have to be urged on in their work. But this is only another way of saying that children differ in their make-up, and that they are human. Certainly, no one assumes that all children are equally desirous even of studying at all—much less that they are desirous of studying the same thing ; such things become patent, even in the best-organised Dalton schools. Neither is it true to say that all will necessarily go well if a child is allowed to work at his own rate of speed.

There are always some children of the lazy type who will shirk work, or perform it indifferently, under whatever system they work. These differences in the rate of working, however, are certainly not more pronounced in children than they are in adults, and no one claims that a Dalton organisation is going to eliminate these differences altogether. It may make them less acute, and, in all probability, place them in their right perspective.

It has been suggested also that the Dalton Plan means a diminution of the intimate care and oversight of the pupils which the class method, because of the smaller numbers to be dealt with, provides, as contrasted with the large numbers that fall to the care of any individual subject teacher under the Dalton Plan. There is no reason why this should be so. The present writer's experience is that the relations between teacher and child, under Dalton working, are quite as intimate, if not more intimate, than under the old system.

These, however, are but details arising out of the new organisation itself. The main thing to remember is that the Plan is not rigid, but elastic, and, in some form or other, can be made to fit the peculiar conditions of any school or class in the land. Indeed, the variety of applications of the Plan in vogue, both at home and abroad, goes to show that it is not the details arising out of the application of the Plan that are the chief concern, but the basic principles on which the Plan rests. It is the new orientation along the lines of social activity that make the Plan worth considering at all, and provide its attraction to educators generally.

That some such change in the organisation of

schools was long overdue is evidenced by the unusual amount of interest displayed in it on every hand. At home, hundreds of schools have adopted the Plan in some form or other, not always, perhaps, for the whole of the reasons set out above, but certainly for good and cogent reasons. Abroad—in some countries very widely—extraordinary interest has been evinced. The widespread nature of the interest displayed will be noted in the later chapter dealing with it. Everywhere there are signs of welcome to a change that has been the means of infusing new life into many schools and making even dry bones live.

So august a journal as the *London Times*, in its issue of April 25, 1924, suggested in a leading article that "what is known as the Dalton Plan by which children, under supervision, educate themselves, should be developed." The *Daily News*, in a series of articles which appeared in the early part of 1925, paid glowing tributes to "our changing schools." In all these articles, greater self-dependence and greater self-expression, in a greatly changed organisation, are the notes most insisted on. Stories depicting elementary school life have in the past been sadly lacking in the great world of fiction. This is surprising when one recalls the fact that elementary education has been in vogue for more than half a century. Recently, however, a novel, *School for John and Mary** (Elizabeth Banks) has appeared, and marks a stage along a new path. In discussing the kind of schooling they desired for their children, the parents of John and Mary say: "We ask for them a broader and

* *School for John and Mary*, Elizabeth Banks (Putnam).

wider view, and a preparation for a life of happy labour with their brains and with their hands. We want them to become modern British citizens of the New Order and the New Dawn." So they decide to send John and Mary to a L.C.C. elementary school whose "three departments are run on what is known as the Individual Plan, or the "Find-out-for-yourself" system. The children are not made to fit any plan; the plan is made to fit the children—a separate plan for each child. To her (Miss Edgerton, the teacher in Mary's School) every child is a little individual, a soul, to be studied and catered for. There is no bunching, nor forcing. Each child progresses at its own rate of speed, and all the children are doing what they want to do." "I want you," says Miss Edgerton to the mother of John and Mary on the occasion of a visit to the school, "to notice how naturally the children accept your presence, acting just as if you were not there." The mother had indeed noticed "that utter absorption of the children which made them almost unconscious of the presence of a visitor. . . . Complete silence was not demanded of the girls. They moved about freely, spoke gently to one another, and did very little hand-raising." Ellis of Arlington (the master of John's school), in the same story, puts the whole thing in a nutshell: "While these boys are in my care they shall have the joy of life, joy of learning, in so far as I can give it them."

This is valuable testimony to the changes that are taking place.

"When the time comes," says one of the most

eminent educationists of our time, "for retrospect and for summing up the movements of opinion in English education during the last few years, the historian will dwell upon the significance of Miss Helen Parkhurst's influence and of the Dalton Plan. The Plan has been one of the chief threads round which have crystallised the hopes of a new kind of responsible freedom in English schools and Colleges. That the interest taken in the Dalton Plan is not an isolated fact but has been accompanied by other signs, is a proof that Miss Parkhurst has diagnosed a real danger, escape from which is desired by many teachers and by many young people. In one sense, Miss Parkhurst's plan is a return to the sound tradition of the old classical education. At its best, that education threw much responsibility on to the learner. He had to do a thing for himself. In his training, there was a large and valuable element of self-training. But it is characteristic of our time that the Dalton Plan is individualistic but co-operative. It encourages team work. Miss Helen Parkhurst, Miss Charlotte Mason, Sir Robert Baden-Powell, and the late Mr. F. W. Sanderson of Oundle, are the four conspicuous leaders who have headed the reaction against undue passivity in school studies."*

When one seriously considers school as Dr. Nunn suggests should be done, † as the middle period between the child and the great world, and when, in addition, one reflects that, for the vast majority of school children, the middle period ends far too soon—to be followed almost immediately by the rough and tumble of the world's great struggle—

* Sir Michael Sadler (quoted from the *University of Colorado Bulletin*, vol. xxiv. No. 10).

† Lecture, March 6, 1925, Westminster, by Dr. T. Percy Nunn.

it is surely time that the forms of school organisation and their functions, and the mutual relations of individual and corporate school activities, such as are suggested by the Dalton Plan, received the fullest possible consideration from all those interested in the welfare of the child and in educational development.

CHAPTER II

FURTHER DETAILS OF THE WORKING OF THE PLAN

At the outset of an experiment many things are vague and blurred which, afterwards, become clear as the experiment proceeds. The experiment of the Dalton Plan affords no exception to this rule. The keeping of Records is one of the things that, at the beginning, was tentative and vague. Miss Parkhurst, in her book *Education on the Dalton Plan*, mentions three graphs each of which is intended to register, in one form or another, the progress of the pupil. One is for the pupil upon which he indicates for himself, from day to day, his own personal achievement; another is for the instructor, and is the one on which he registers the achievement of all the pupils in his care, the entries corresponding with those on the scholars' graphs; while the third registers the progress of "Houses" where schools are run on those lines. Nowhere does Miss Parkhurst refer to a head teacher's record. This was a curious omission. The writer has good reason to know, however, that it was not entirely absent from Miss Parkhurst's mind when she wrote her book, for she herself uses one of her own compilation to suit her own needs. It is necessary,

however, to insist that a head teacher's record is a very essential part of the machinery of any school where the Dalton Plan operates. In his previous book,* the writer gave an illustration of the register he evolved for his own purpose which, he found, within two months of the inception of the experiment, was indispensable. What happened at first was that all boys began their Dalton work on the same day. Every day that passed altered the relative positions of these boys with regard to their work, and to one another. Some boys, who were eager with their work, were quickly outstripping their fellows, completing their own monthly cards and taking fresh ones. As time went on, boys were at different stages of their work. It then became impossible for the head teacher, offhand, to locate any boy in relation to his work, and the record became necessary. The kind of record that first suggested itself was as follows :

ASSIGNMENT I.						ASSIGNMENT II.					
Name.	Date started.	Date completed.	Days taken.	Days allowed.	Order.	Date started.	Date completed.	Days taken.	Days allowed.	Order.	Etc.

Further experience has led to the simplification of this record and, as now used, it appears as follows :

* *Individual Work and the Dalton Plan* (Philip).

FORM.							
Assignment.	I.	II.	III.	IV.	V.	VI.	Etc.
Name.	Started.	Started.	Started.	Started.	Started.	Started.	

This chart, in actual practice, is a much more manageable thing than the first one, and contains, if not categorically, at any rate by implication, the salient points of the earlier chart. Moreover, it is easy to keep.

It is worth while examining in some detail an actual specimen of the head teacher's record in order to see, at a glance, what it shows. The specimen is here reproduced.

The dates on this chart are obtained in a very simple way. When a boy has completed his own card, and the subjects completed have been initialled by the subject teacher and dated, the card is brought to the headmaster who at once enters up the date on which all the subjects were finished, and issues a new card.*

The first thing that strikes one, on examining this record, is which are the fast, and which are the slow boys, and the differences between them. In effect, it is a map of each boy's rate of speed. Taking into account the character and disposition of each boy in the list, the rates are, on the whole, fairly accurate.

* *Individual Work and the Dalton Plan* (page 68).

FORM I. FIRST CONTRACT.

No.	Assignment. Name.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
		Started.	Started.	Started.	Started.	Started.	Started.	Started.	Started.	Started.	Started.
34	Ridley, L. . . .	10.4.23	4.6.23	31.8.23	13.12.23	14.2.24	8.5.24	28.5.24	15.7.24	21.11.24	9.1.25
35	Sargons, A. . . .	10.4.23	19.5.23	25.6.23	25.7.23	8.10.23	28.11.23	18.1.24	18.2.24	19.3.24	1.5.24
36	Skelton, J. . . .	10.4.23	22.6.23	7.9.23	16.1.24	6.10.24	7.11.24	28.11.24	31.1.25	3.3.25	
37	Spring, C. . . .	10.4.23	16.7.23	16.11.23	20.12.23	25.1.24	4.3.24	15.4.24	11.9.24	31.10.24	8.1.25
38	Squires, G. . . .	10.4.23	18.6.23	30.10.23	9.1.24	22.2.24	14.4.24	26.6.24	19.9.24	7.11.24	12.12.24
39	Stiff, J. . . .	10.4.23	2.5.23	19.5.23	18.6.23	10.7.23	29.8.23	24.9.23	12.10.23	7.11.23	3.12.23
40	Swallow, E. . . .	10.4.23	10.10.23	23.11.23	11.2.24	6.3.24	10.9.24	7.1.25			
41	Squate, B. . . .	10.4.23	8.6.23	17.7.23	19.10.23	7.12.23	13.2.24	24.3.24	27.5.24	28.8.24	15.10.24
42	Taylor, R. . . .	10.4.23	4.5.23	30.5.23	25.6.23	6.9.23	8.10.23	9.11.23	15.12.23	25.1.24	28.2.24

The records of these boys are shown below continued under the name of Form 2, which the age-group had reached at the end of one year.

FORM 2. SECOND CONTRACT.

No.	Assignment. Name.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
		Started.	Started.	Started.	Started.	Started.	Started.	Started.	Started.	Started.	Started.
34	Ridley, L. . . .	25.3.25									
35	Sargons, A. . . .	23.6.24	2.9.24	11.10.24	28.11.24	23.1.25	16.3.25				
36	Skelton, J. . . .										
37	Spring, C. . . .	27.3.25									
38	Squires, G. . . .	3.3.25									
39	Stiff, J. . . .	12.1.24	12.2.24	6.3.24	4.4.24	19.5.24	4.7.24	To Central School			
40	Swallow, E. . . .										
41	Squate, B. . . .	8.12.24	11.2.25								
42	Taylor, R. . . .	1.4.24	6.5.24	2.6.24	14.7.24	11.9.24	1.10.24	18.10.24	11.11.24	18.12.24	12.1.25

The last named has entered his third contract and has already finished two of the assignments in that contract.

TABLE I.

Let us examine it a little more closely. The dates are important. There are two boys who completed the year's work in less than a year—one (No. 39) in eight months, the other (No. 42) in ten months; there are two who have not completed the year's work in about two years. Between these two extremes lie the other five. One (No. 35) had all but completed his work in one year, and another (No. 41) took a year and a half. The other three are curious cases. No. 36 suffers from innate slowness. He is by no means a dull boy. Recently (March, 1925) he sat for the Entrance Examination for the Central Schools for boys of 12+. He stood second on the list for the school, with well over 75 per cent. of the total marks.* No. 38 is the case of a boy who was advanced six months at the request of his parents, to enable him to push on with his work. His record shows that he is not quite equal to the demands the work makes on him. The remaining case (No. 40) is that of a boy who, during his brief school career, has lost both his father and mother, and who himself suffers from ill-health. The "stretches" in his assignments are accounted for by these causes. The boy is by no means a duffer, he regularly took up his work on his return from his absences where he left off.

Experience shows that most boys accelerate in speed as they proceed, and the head teacher's record invariably shows much less disparity in the length of the times between the dates of starting and completing assignments when the higher forms are reached.

* See *Individual Work and the Dalton Plan*, p. 88, for a similar case.

Critics will assuredly point to the apparently inordinate amount of time some boys take to complete a year's work. This may be so, but it should be remembered that the degree of difficulty of an assignment, and the fact that the assignments are not graded, may, in some measure, account for this. That is undoubtedly the case in some of the examples given. On the other hand, the head teacher can point, with satisfaction, to the fact that, in every case, the boy has covered every inch of the ground so far as he has gone.

Further, the critic may point to the fact that there are no two boys at the same stage, and inquire, as is so often done, how a class lesson can be given with boys at such different stages of their work. The difficulty, however, is more apparent than real, and is dealt with fully in the writer's previous book, as well as in a later* chapter in this. In practice, this situation need create no obstacle to class teaching.

It may further be objected that there must be difficulty in giving terminal tests. That difficulty, again, may easily be exaggerated. To clear the way, it should be stated at once, that tests are given regularly twice a year, and that these tests are really tests of work done, and not necessarily qualifying tests on the results of which promotion depends, for the simple reason that there is no "promotion," in the old sense, from one standard to another, because standards, as such, do not exist. The boy promotes himself as he proceeds from contract to contract. These tests of work done are, as stated, given twice a year, and, in order that

* See p. 74.

the tests may fit every boy, two tests are set on each year's work—one to cover the work comprised in assignments I–V, and the other that comprised in assignments VI–X. The tests are made fairly broad in scope to meet any possible difficulty, and to ensure that, periodically, in addition to the testing of each month's work by the subject master, the work of each boy is measured up regularly.

A further matter, to which attention has not previously been drawn, is the necessity of so dating the work done by each boy in his exercise book as to make it possible easily to trace the work, compare it with the assignments, and ascertain whether the amount of work done by the boy is adequate. In the writer's school, the loose-leaf system has been installed, and necessitates even a more careful eye on this matter. To facilitate this labelling of work, each sheet has the following heading printed on it :

C. A. P. Subject..... Name..... Page....
Date :

The heading is self-explanatory, except, possibly, the first three letters, which stand for Contract (the year's work), Assignment (the month's work), and Period (the week's work).

A further matter upon which a good deal of attention has been bestowed is the question of attempting to get some definite time basis on which to build up the assignments of work. It is not sufficient in any subject just to indicate the pages to be read, problems to be worked, or questions to be answered without making some attempt to apportion time values to the exercises. To ask a boy, for example, to write an essay, and to leave

him without the slightest idea as to how long he is expected to take over the work, is to court disaster. While avoiding, therefore, the slightest impression of ticketing and docketing, experience has shown that, for both teachers and pupils alike, a sense of time values is of very great assistance. For the teacher, it precludes any attempt to roll too great a burden on the child by expecting him to do impossible tasks in the time allowed ; for the child, it is a constant reminder that time is passing and that there are limits to the amount of time that should be occupied by the questions set.

In the writer's school, with no previous experience to guide one, the following represents the attempt to arrive at some working basis of time values. The subjects named in the first column are those that are Daltonised in the school. The second column indicates the time given to each subject, and its relation to the time available each week for all subjects. The third column indicates the amount of time taken for purposes of class teaching. The fourth column shows the amount of time allocated to the child for his own purposes. The last column makes some attempt to indicate the time value of a unit of work in each subject. Columns three and four show the relation of the time devoted to individual work to that taken by the teacher. The table is as under :

Subject.	Hours available.	Time for class work.	Time given to pupils.	Length of unit.
English . . .	5	—*	5	60 mins.
Literature . . .	5	1	4	48 "
Arithmetic . . .	4	1	3	36 "
Geography . . .	2	1	1	12 "
History . . .	2	1	1	12 "
Drawing and Science	2	1	1	12 "
Totals . . .	20	5	15	3 hrs.

TABLE 2.

It was pointed out that though these "time values" are worked out in this way, they are not rigid and inelastic times, but serve mainly as guides.† In fact, it is seldom that a boy works exactly to such times. It appears to the writer that it would be forfeiting one of the main advantages of the Plan, if, while boys were enjoying the amenities of the changed organisation which the Dalton Plan provides, they were expected to keep rigidly to these times. Indeed, it would be remarkable and even humorous if a boy conceived the notion of employing his three hours' free study per day in attempting to accomplish 60 minutes' English, 48 minutes' Literature, 36 minutes' Arithmetic, and so on. As has been previously stated, boys do not work in this clock-wise fashion. If they attempted to do this with any sort of regularity, they would be cutting themselves away from the very freedom the Dalton

* The omission of a long class lesson in this branch of English is explained in the author's previous volume.

† *Individual Work and the Dalton Plan*, p. 49, onwards.

Plan is designed to provide. To be sure, that is not the purpose of the time values. As stated above, they are intended to be useful guides to both teacher and child, and, moreover, provide some solid basis on which the academic work of the school can be built up.

It must be understood that the whole arrangement set out in the table above is merely the arrangement made to fit the conditions and requirements of one particular school. It by no means follows that the same arrangement of subjects and time values would fit the conditions and requirements of any other school. It is just possible the table could be made to fit, by the simple expedient, for example, of halving the times, if ten hours, instead of twenty, were the number of hours available in any other school for the subjects named. But it is most likely that the subjects taken and the time available for them would vary as from one school to another. In that case, the details of the above table would have little or no value in those particular cases.

This matter is being discussed at length here because it is the rock on which so many would-be Daltonians split. Any attempt to take over, "lock, stock, and barrel," the table of another school, and make it one's own, is by no means the proper way to deal with this matter. The only safe way is to work out such a table for oneself, bearing in mind the peculiar conditions of the school as to staff and equipment, and the requirements of the pupils.

The two following tables are intended to illustrate such variations as would take place where the number of subjects taken varies, or where the

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time available differs, or where the number of subjects and the time available both vary :

Subject.	Hours available.	Time for class work.	Free study.	Unit.
English . . .	3	1½	1½	18 mins.
Arithmetic . . .	5	2	3	36 "
Geography . . .	1½	¾	¾	9 "
History . . .	1½	¾	¾	9 "
Drawing . . .	1	—	1	12 "
Totals . . .	12	5	7	1 hr. 24 mins.

TABLE 3.

Subject.	Hours available.	Time for class work.	Free study.	Unit.
English	3	1	2	24 mins.
Geography	2	1	1	12 "
History	2	1	1	12 "
Totals	7	3	4	48 "

TABLE 4.

These tables are not given to indicate any opinion on the choice of the subjects named in them, or on the times devoted to those subjects. They merely assume that the time available for those subjects, having already been determined by the exigencies of the time table, or for other reasons, some such calculation could be made as is here set out. The point to stress is that no wise experimenter will proceed far with his experiment till some such fundamental groundwork has been carefully laid

out. It may be worth while to say a word here about the relation that is shown in each of these tables between the time available for class teaching and that for free study. It was hinted above that the present writer had no previous experience to guide him in this matter, and so he made a rough allocation of time as between class work and free study, by deducting one hour from each of the subject-times, except in the case of formal English. The writer has explained elsewhere* the reasons for this exception. It was mainly for the reason that long lessons in that subject were inappropriate, beside being distasteful to the pupils, and that, moreover, this arrangement allowed of a more easy solution of the "marking" difficulty in the school. Short formal English lessons are, however, given in the 20-minute periods that occur immediately after recess either in the morning or the afternoon.

Later experience shows that this rough allocation of time was indeed very rough. Whilst there seems no good reason to alter the present arrangement as to formal English, there is good reason to believe that more class-work could be advantageously taken in both Literature and Arithmetic. The apparent overloading of the time table with "Mental Arithmetic," † which has been referred to by many correspondents, is an evidence of the feeling in this respect, as well as an indication that, at the moment when the time table was drawn up, things were not going well with Arithmetic.

Quite recently (June, 1925) Miss Parkhurst has been dealing with the practical side of her theory

* See *Individual Work and the Dalton Plan*, p. 104.

† *Ibid.*, pp. 36-37.

along these lines. As she has dealt, in some measure, with the allocation of time to subjects, it may be as well to give here what she herself says on this matter, to those about to operate the Plan :

“ A morning in a Daltonised school is divided into two short periods and one very long period, viz. : first, an organisation period lasting from 15 to 30 minutes ; second, a laboratory period from two to three hours, and, preferably at the close of the morning, a conference period lasting 30 to 40 minutes.

“ The Dalton Plan does not prescribe any set amount of time for ‘ laboratory time,’ but it is suggested that, whenever possible, three-fourths of the morning time be made available for this purpose.

“ Let us say that a school sets aside three hours as laboratory time ; then in a school month of 20 days, a pupil’s laboratory time would approximate 20 times 3 hours, or 60 hours. Each pupil, therefore, would have at his disposal 60 hours in which to do his 100 units of work. This 60 hours is budgeted by each pupil to serve his individual needs, and definite instruction is given as to how to budget time. If the pupil does the entire job (100 units) in less than 60 hours, he immediately proceeds with the next job. There is no waiting for slower pupils, nor are slow pupils rushed along at an accelerated rate or carried by the momentum of the class, producing inaccurate, slovenly work ; nor would a slow pupil have to finish in 20 days. He may have more time whenever necessary ; nor is a 20-day period supposed to coincide with a series of school or calendar months. A pupil counts ‘ one ’ as his first work day, and so marks his work graph. ‘ Two ’ is his second day, etc. Absent days are not counted. We go from 1 to 20 because work is set on a 20-day basis.

“ If a school desired to devote to English the equivalent of 40 minutes a day as a minimum, then the English

teacher in mapping out his work, would guard against outlining more for 20 days (20 units) than could be done by a slow pupil in 20 times 40 minutes, or 800 minutes. We go further, for we make weekly divisions. These weekly divisions do not block a pupil's interest or retard his progress; they are psychological divisions rather than actual stop signals; they merely indicate to the pupil that a fourth of any subject of the job is completed and put behind him. In the particular subject mentioned, English, the teacher's 'time set' for a week would be 5 times 40, or 200 minutes.

"A pupil may do all of his work, subject by subject, one subject at a time, or a little of one and much of another. He is free to plan his own time and discover his own better methods of work. The reason for a 'time set' should be made clear. It is to make sure that the job set for 60 hours can be done, by a slow pupil, in that time. I here give a 'time set' for a school with a curriculum comprising five subjects and 60 hours laboratory time":

TIME SET.

Subjects.	A day's work (1-unit basis).	A week's work (5-unit basis).	A month's work (20-unit basis).
English . . .	40	200	800
History . . .	45	225	900
Geography . . .	45	225	900
Mathematics . . .	30	150	600
Science or Nature Study . . .	20	100	400
A month's job of 5 assignments	180 mins. or 3 hrs. daily	900 mins. or 15 hrs. a week's basis	3600 mins. or 60 hrs.

TABLE 5.

It may not be out of place to add a word about the compilation of the time table. Many who feel

kindly towards the Dalton Plan find difficulty in arranging their time tables. It should be understood that the remarks which follow apply mainly to Elementary Schools. An examination of the time table shown in the previous volume discloses several features that are both useful and convenient. In the first place, the main features stand out boldly—the free-study periods, in the morning session, are from 9.30–10.30 and 11–12. The half-hour between 10.30 and 11 is taken up with recreation, and the short lesson, already referred to, which is so useful for group work in subjects like choral music or physical exercises which cannot be taken in any other way, or, with short lessons in English and Mental Arithmetic. In the afternoon session, the free-study period is from 3.30–4.30, while the ordinary class lesson is from 2–3. Here, again, the half-hour between 3 and 3.30 is used very much as the similar time is used in the morning. Those short-lesson periods are among the most useful features in the time table. In the next place, it will be observed that it is no accident that there are five subjects for which class lessons have to be provided, and thus five teachers, that there are five classes, and, of course, there are five school days in the week. To secure an arrangement of this kind is to make the drawing-up of a time table simplicity itself. In the third place, it may be pointed out that class and free study periods alternate with each other throughout the day, and prevent too great a strain being placed on the pupils by an unbroken prolongation of periods of self-study which might otherwise become wearisome. This arrangement is not unimportant,

for it has been noticed that, when it has been necessary, in the interests of visitors, for example, who wished to see the Dalton Plan working, to continue free-study periods during the first hour in the afternoon, in addition to the regular periods, there has been a distinct air of fatigue and exhaustion noticeable at the end of the day on the part of the boys. To adhere to the time table in that case makes it what a time table should be—a corrective—as well as a real guide. To have abolished the time table altogether would, in such a case, have been disastrous.

One of the virtues of the Dalton Plan organisation is its elasticity, and the ease which, with very little adjustment, it can be made to meet such difficulties as arise in the course of the daily round. One of the greatest difficulties that has to be faced is that of the boys who fall behind in one or more subjects. The present writer has dealt elsewhere* with the provision, in the early stages of the experiment, made at that time, to deal with such cases. It was by means of an Adjustment Room. The results arising from this arrangement were admirable. But a time came when, on account of changes in the Staff, it became impossible to set aside a master who, during free-study periods, could be spared from other work to give his whole time to this room. Some other arrangement became necessary, and, for a time, therefore the Adjustment Room has had to be closed.

In a later chapter something will be said about the Dull Child. The present writer may so far

* See *Individual Work and the Dalton Plan*, p. 39.

anticipate what will there be said in order to point out that the majority of boys who found their way into the Adjustment Room did so because of backwardness in Arithmetic. It was seldom the case that any considerable number went there because of Geography or History. It seemed advisable, therefore, having closed the Adjustment Room, to make some definite provision for the boys backward in Arithmetic. The idea was to gather these particular pupils together for special treatment.

To make clear what was done it is necessary to refer to another matter which bore very closely on this. It will be evident from a study of Table 2, that it would be only natural to find, during any of the free-study periods, some rooms more crowded than others. It may be illustrated in this way. There are six subject rooms in which, during any one week, a boy should normally spend 20 hours. One-half of this time should be spent in the two rooms devoted to one or the other branch of English. The other half should be spread over four rooms. It is obvious, therefore, that the English Rooms would be more full than the others. Another glance at the table would indicate that the Arithmetic Room might be expected to be fairly full. Proportionately, it should be quite as full, because, whilst, in English, a boy had nine hours to spend over two rooms, in Arithmetic four hours had to be put in in one room. A careful record was kept, for some days, of the number of boys in the various rooms in order to fix carefully what was the best course to pursue. The following figures for twelve consecutive days are interesting :

Subject.	Literature.	English.	Drawing.	History.	Geography.	Arithmetic.
1st day	56	59	12	14	14	36
2nd "	47	54	17	13	16	34
3rd "	40	47	13	18	14	40
4th "	45	44	15	16	16	42
5th "	49	52	11	17	26	18
6th "	36	41	18	14	8	48
7th "	30	46	11	14	16	48
8th "	31	50	14	12	14	50
9th "	31	41	11	15	18	47
10th "	45	51	6	8	11	49
11th "	36	46	7	20	8	46
12th "	31	43	12	19	14	46
Average	39·7	47·8	12·2	15	14·6	42

TABLE 6.

These figures take no account of the numbers who were daily in the Adjustment Room. It will easily be seen, from the figures set out, which rooms were regularly full, if not congested, and those where the pressure was least. These figures coincide fairly accurately with what one might expect from a close study of the time allocated to subjects in Table 2.

The smallness of the figures in the Drawing Room, and the comparative smallness of those in the Geography and History Rooms, led to the idea of shutting down these rooms for the purpose of free study in those particular subjects on one day each week. Thus, three days became available for the express purpose of catering for the boys who were backward in Arithmetic. The arrangement actually come to, was that all the boys concerned (about 40 of them—ages 10-14) went to the Geography Room on Tuesdays, the History Room

on Wednesdays, and the Drawing Room on Thursdays for the first hour (9.30-10.30), usually devoted to free study in Geography, History, or Drawing, and took Arithmetic. The group was then split up into three parts and each of these smaller groups, in turn, spent the remaining six hours (two each day) pursuing the same subject, with greater intensity and under closer supervision in those same rooms. The writer has described this adaptation in detail not only to show what was actually done with the weaker pupils in Arithmetic, but also in order to show that nothing in the Dalton Plan is unalterable, but that difficulties and problems as they arise can be met, and, as far as may be, solved.

A similar arrangement to this was made at another time, in order to help, through various forms of Handwork, these backward pupils.

These arrangements worked well for a time, but for reasons that had little to do with the Dalton Plan itself, a further re-arrangement had to be made, namely, the times originally given to the pupil and teacher respectively have been reversed, and now three hours are given to class teaching in Arithmetic and one to the child.

Another matter upon which experience throws a good deal of light is the age at which to begin working with full-dress assignments, as those assignments are understood in the upper parts of our senior schools. In the experiment, with which the writer is connected, the commencing age is roughly ten plus. Sometimes children of nine and even eight are allowed to pass into Dalton work, but that is only done if circumstances and ability warrant such procedure. Speaking generally, however, it has

been found that ten plus is the most suitable age to begin. This age corresponds, in the writer's school, with the period of emergence into Standard V. It has been found, in actual practice, that on entering Dalton work the majority of children are slow in picking up the reins. The main cause of this was undoubtedly the great change experienced in passing from the old method to the new. It is unnecessary here to go into details as to what that change really means, but, briefly, it may be stated as a change from a method where a very great deal of work is done for the child, to a method where the child is expected to do a very great deal for himself. It is nothing short of an educational revolution which takes the child time to get used to. It should not have been surprising that, under the new conditions, children at first were inclined to be slow. This was not an accidental accompaniment of the change in any one year, for it was observable that the same thing happened on each occasion during the last three years, when fresh batches of children were drafted into the Plan. The fact that acceleration came after the first three or four months did not suffice to make up for the time lost during the earlier period. It became imperative to see if something could be done to lessen in some way the handicap caused to boys, some of whom felt their progress was being retarded.

Accordingly, arrangements were made recently to organise a class which would be immediately below the Dalton group, and which would act as a reservoir from which Dalton boys could be drawn. In effect, what happened was that a Sub-Dalton class was started. The boys of this group were

gathered from the existing Standard IV (not all of them, but selected boys), and included some from Standard III who showed promise. Altogether there were about forty of them. They occupied a special room which, through the kindness of Miss J. M. Mackinder, herself an enthusiast for Individual Work,* was furnished with small chairs, and four large square tables each capable of seating twelve boys if necessary. These tables became subject tables, and the same principles operated, between table and table in the one room, as operate between room and room in the larger experiment. Assignments of a modified kind were prepared in each subject, and boys help themselves to these, working them in very much the same way as is done in the actual Dalton work, and moving from table to table (*i.e.* from subject to subject) as they desire, or as circumstances permit. A time table is worked to, and careful records are kept. There is nothing original in this arrangement, as any reader well knows who is familiar with the work of Miss Cook, of Dover.† The establishing of this Sub-Dalton group has, however, had the effect of counteracting the slowness, at first, of those pupils who enter the Dalton Plan, by the simple device of creating the right environment, and by getting the pupils used to handling for themselves assignments, books, and so on, and thus becoming prepared for the later and larger work to which they will eventually go.

This additional experiment in the writer's school

* See *Individual Work in Infants' Schools*, J. M. Mackinder (Educational Publishing Co.).

† See *The Sub-Dalton Plan*, Miss E. Cook, LL.A. (Dalton Association).

has had the further effect of bringing under Dalton conditions another standard group. Standards II III and IV still remain under the conditions of the old class method. Whether, and how far, it is possible, or desirable, to proceed with these lower classes along the lines of Sub-Dalton methods, the present writer is not prepared, at present, to express an opinion. It may be that the methods at present in vogue in infants' schools, where individual work is practised, are the best also for children of seven or eight, or even nine. On the other hand, the Sub-Dalton method may be the best. Or, it may be that, on the whole, the class method will still hold the field for children of these ages. It is difficult to say. There is here a piece of educational ground which has not yet been fully explored. The "gap" between the individual work of the infants' schools and the Dalton work of the upper classes of senior schools is a very real thing, and invites the consideration of the best experimenters in scholastic work.

Enough has been said here to show that rather than a stern rigidity, the Dalton Plan implies, and indeed encourages, modification and adaptation to the varying needs of the schools which adopt it. It possesses in itself nothing that prevents it being applied in such a fashion as to meet the conditions peculiar to any type of school. Whatever form the machinery of organisation under the Dalton Plan takes is of smaller consequence than the assurance that, be the form what it may, the principles which underlie it remain unchanged.

CHAPTER III

TESTS OF THE EDUCATIONAL EFFICIENCY OF THE PLAN

SOUND in theory as may be the underlying principles of the organisation of schools—particularly the upper parts of the schools—on the Dalton Plan, it must be acknowledged that such results as accrue may be claimed to be mainly those of a social nature. They are seen in the greater naturalness, greater independence, greater self-reliance, greater self-control, and so forth, of the pupils themselves. There is also a greater sense of responsibility as well as a greater respect for work. Without a doubt these are consequences of no mean value. At the same time, it is fair and right to inquire if, having secured these under the newer method of organisation, similar consequences of an educational kind, in the more academic sense, are also as plainly observable. After all, while it will not be denied that character and service are paramount aims in the purposes of modern schools, and that the development of the expression of individuality is part and parcel of that work, it is still necessary to show that educational efficiency, in the narrower sense of getting through the curriculum with credit, is possible, and in fact accomplished, in the course of everyday procedure. It would not be difficult

to argue that social efficiency implies educational efficiency, but discarding, for the moment, the truth of this statement, it may be worth while to concentrate attention on those aspects of school life and work by which, fortunately or unfortunately—unfortunately in the writer's opinion—the work of schools is mainly judged. As Dr. O'Brien Harris quite aptly says: "Though a schoolmaster is incidentally expected to be a character-builder, it is by his work on the intellectual side that he is chiefly judged."* It may be argued that to judge any school from this standpoint alone is unjust and unfair, because the real and abiding consequences of schooling are not such as can be held in the hand or weighed in a balance. But the fact remains that this has, in the past, been the main method of assessment, and, in one way or another, whatever may be one's opinion about it, is the means of assessment still in vogue. One does not say that this aspect of school work should not be considered; indeed, it would be idle to claim for schools any exemption in this respect, for, when all is said and done, the teaching of the three R's and all that it implies is a part, and a very great part, of the work of any school, and the school which failed to make considerable and reasonable headway in such teaching would, by that failure, stand condemned. But that is not to say that this should be the only test of success or failure. The fact that children vary in ability, that schools differ in equipment, staff, outlook, and so on, are all of them considerations of prime importance. What one is justified in asking is that the school be

* See *Towards Freedom*, p. 29.

judged on results as a whole—that ability to work sums, to avoid mis-spellings, to win medals and trophies, or even to win scholarships, are not the sole criteria by which the success or the failure of the schools should be measured.

In view, however, of criticism of the Dalton Plan along the lines of possible educational inefficiency that has come from various quarters, it is as well to meet that criticism by placing before the reader certain statistics that have been obtained from various and reliable sources.

In the writer's school, it has been customary during the whole course of the experiment to hold full-dress tests half-yearly. The method of setting the tests has been referred to elsewhere. It is difficult, of course, to frame successive tests that shall be of equal difficulty and value with the first tests set, but as far as it is humanly possible to secure it, some sort of equality is maintained. The figures which follow give the results, in percentages, of two successive tests with six months' interval between them. They are the results of precisely the same boys, and are interesting in many ways. The percentage mark is given for each subject.

Subject.	Form 1.		Form 2.		Form 3.		Form 4.		Form 5.	
	Sept., 1923.	April, 1924.	Sept., 1923.	April, 1924.	Sept., 1923.	April, 1924.	Sept., 1923.	April, 1924.	Sept., 1923.	April, 1924.
English .	54·8	77·8	61·8	85·0	56·0	66·7	74·6	74·2	74·8	71·4
Literature .	57·1	65·0	62·7	70·5	46·1	62·5	58·7	65·2	56·6	68·2
Arithmetic .	50·0	68·0	41·5	42·4	52·5	56·5	53·3	64·8	59·0	80·0
Geography .	55·7	76·7	45·3	59·7	67·8	73·1	63·7	66·6	80·0	80·6
History .	50·5	62·5	53·3	60·1	50·0	66·3	62·0	70·6	68·6	44·5
Drawing and Science .	42·0	61·2	43·5	65·1	55·0	78·0	77·6	82·0	80·7	77·0

TABLE 7.

It should be stated that these figures were compiled in the ordinary way from the boys' own work—they are not furnished merely to prove a case. It is worth while looking into them in detail, but, before doing so, one may safely point to them as, on the whole, good evidence, as far as figures obtained in this way go, of distinct and steady progress. Form 1 represents the youngest boys of ten plus. Form 5 represents the oldest pupils. Forms 2, 3, and 4 those in between. It will be observed that, on the whole, the September percentages in all subjects show a steady advance over the March results, and those in all the forms over those of the form below. This is best illustrated in Drawing and Science, where the percentages for September, 1923, are respectively as follows: 42, 43·5, 55, 77·6, 80·7. This progression in the forms is what one would naturally expect to find. Most subjects show improvement in each Form over the six months. The present writer was particularly interested, for reasons set out in his previous volume,* in the Arithmetic results, which here show uniform, though not excessive improvement, an improvement most noticeable in the lowest and in the highest groups. Improvement, in all subjects, however, is not the rigid rule; there are notable exceptions, chiefly in Form 5. An examination of the English and History results shows a decline of 74·8–71·4 and 68·6–44·5 respectively. Indeed, taken as a whole, this particular Form did not distinguish itself. The reason is not far to seek. The writer's experience of older boys, whether working under the Dalton, or any other plan, who are living in the

* See *Individual Work and the Dalton Plan*, pp. 193 and ff.

shadow of the school-leaving period, is that they are the most difficult of all boys to get to concentrate on their work, and to apply themselves to it with enthusiasm. The fact that they are soon to leave (it may not be for six months) seems to obsess them, and, in place of the appointed work, they will willingly seek to do any odd job about the place rather than their appropriate work. And the astonishing thing with many is that they will perform these odd, and often menial, jobs with far greater fervour. There are exceptions, of course. The drop in the History marks shows quite clearly that the work required in the assignments, particularly the reading, had not been done; the drop in English, though not so great, seems to betoken a sort of indifference due to the reason given. The rise in the Arithmetic mark, on the other hand, would appear to be the direct result of a good many months of intensive work in the subject.

The results of Form 1 are also interesting. By September, this group had already been working under the Dalton Plan for six months; the April figures, therefore, are those obtained at the end of the first year. They are distinctly encouraging.

So far, therefore, it may be said, the results of the ordeal, by school test, give no cause for dissatisfaction, and that the organisation of the school under the Dalton Plan led to no dire results in this respect.

Just as the author's previous volume was emerging from the Press, he was able to add to the introduction a note respecting a small piece of research work undertaken in the school on the application of Group Tests to the comparative

measurement of attainment with special reference to work under the Dalton Plan. This was carried out in January, 1924, by Mr. L. C. Johnson, a student of Borough Road College, who was given an entirely free hand. The present writer does not propose to give the whole of Mr. Johnson's report—much of it is irrelevant to the purpose of this chapter—nor does he wish to mention by name the school with which the comparison was made, except to say that it was a senior boys' school of good standing. It will be referred to as the "C" School in those parts of the report which are here given.

The Report begins by referring to the difficulty of the work undertaken.

"The difficulty is the choice of a standard for comparison, as it is manifestly impossible to know what boys would have achieved by the conditions of ordinary class teaching. The standard must, therefore, be quite arbitrary. If it were possible to find a school of the same social status—for this is an important feature—and possessing a staff of equal ability, the comparison of the work of the boys in the same relative positions in the school would give an approach to definite results. Even here an examination of the old type would be of little use, since far too much depends on the examiner, and fluctuations in the standard of marking, which are almost inevitable, particularly in the marking of written English, would depreciate the accuracy of the comparison. It was with the idea of attempting to eliminate the personal equation that Group tests were utilised. With sufficiently standardised tests, the results would at once show how the school stood with regard to an 'average performance.' In the present case this was not directly possible, as will be seen later."

The Report then goes on to describe the two schools whose results are compared.

“West Green School,” it proceeds, “has had the upper part of the school working under the Dalton Plan for two years. The school itself is by no means favoured either in position or buildings. Numbers are still fairly large and accommodation has been a source of difficulty. Then, too, the school is rendered noisier than a school should be by the close proximity of a main road extensively used by heavy motor traffic. The social standing is on the poor side, and the surrounding district suffers from bad housing conditions.”

Of the C School the report says :

“This school, which draws its numbers from a neighbouring Junior school, is divided into two main sections which are called Commercial and Technical. The boys on the Commercial side, intended for commercial careers, pay greater attention to English and Geography, while they also include French in their curriculum. The school itself is much more favourably situated than West Green. Surrounded by a residential district of a much higher grade, the buildings themselves are also distinctly superior.

“The classification at West Green is on an age basis, mainly for registration purposes. Thus, there were five groups, Forms 1, 2, 3, 4, and 5—groups 3 and 4 comprising boys of similar ages. The boys in 3 and 4 (two groups of similar age) had been working on the Plan since its inception, having risen from Form 1 (that is, in age). The average age of Forms 3 and 4 was 13 years 2 months. It seemed desirable that these were the boys who should be tested, since any advantage should be shown in the work of those who have been working continuously under the Plan, rather than those who have been working under the Plan for a shorter period.

“ The method of classification in the C School is into commercial and technical work and depends on the previous performance of the boys in the Junior School as well as on social status. The best boys are placed on the Commercial side. As a basis for internal promotion the results of six-monthly examinations are utilised.

“ It will be seen,” continues the Report, “ that for comparison, instead of boys under exactly similar conditions, we shall be comparing the results of boys under the Dalton Plan with boys who have a tremendous advantage over them. Thus, at the outset, we have created a difference between our standards of comparison, but, since the ultimate aim is to discover whether attainments are increased under the Dalton Plan, it is as well that we should not take a standard of comparison that is too low, lest we flatter the results. It is better to make our examination of the results as stringent as possible, since we are not in a position to compare the results of two exactly similar schools.”

The tests applied were the Group tests given by Dr. Ballard in his book, *The New Examiner*.^{*} Two English examinations were given—the first called a Comprehension Test, and the second a Construction Test. The other test was one in Arithmetic.

A word or two may be said about these tests. The Comprehension Test consists of one hundred questions of four varying types, and all these types of questions usually appear in ordinary school examinations. The first ten require the examinee to pick out a word from several which mean the opposite of the given word; the next ten also rest on the knowledge of the meanings of words. The next seventy are of the “ completion ” type—that

^{*} See *The New Examiner*, pp. 167 ff.

is, the questions consist of sentences which have to be completed by one of the words or stops that are given. These questions are based on errors of composition which have been found to be most prevalent in a research of Dr. Ballard's (described in his book). The last ten depend on the understanding of the general sense of sentences. In every case, throughout, the answer is supplied by a single letter or word. This ensures that no time is lost in recording the answers, and also that the mechanical process of writing does not hamper thought. The time for the whole test is one hour. In Dr. Ballard's words: "The examination, as a whole, gauges the candidates' familiarity with, and understanding of, the mother tongue."

In an English essay examination the examiner makes his pupils attempt original and creative work, and afterwards attempts to estimate its value. The Construction Test aims to take the place of the essay examination, since it tests all the qualities which the essay is supposed to bring out.

In the Arithmetic Test, instead of the questions taking some minutes to answer, there is an increased number of sums, each of which takes but a fraction of the time. The test consists of one hundred sums, for which 50 minutes are given. The types of question are addition, subtraction, multiplication, and division of numbers, money, weight, and time; vulgar fractions, square root, percentages and averages, L.C.M., H.C.F., proportion, and the working of areas and volumes.

"Before giving the results in detail," the Report continues, "it is but just to state that there were three small blocks of questions in the Arithmetic paper that

the boys in the Dalton School were not familiar with, since the matter covered had not been dealt with in their syllabus. They covered 14 questions in all. The readers of *Individual Work and the Dalton Plan* will recall the reasons for this. Many boys, however, attempted some or all of these questions, and while allowance for this should be made in considering the results, care must be taken that it is not exaggerated."

The number of boys in the classes were 32 and 36 respectively—the former being the Dalton boys. The norm given is that corresponding to the average age of class from Dr. Ballard's figures. In the case of Arithmetic the norm can be taken as representing accurately average achievement, since the tests have been given to some 15,000 children. In the case of the English tests the norms are probably lower than they should be. Discussing these norms Dr. Ballard himself says :

"I have not applied these tests very extensively, but I have sufficient data to put forward the following scores as tentative norms for elementary school children. The best school tested was two years in advance of the normal, and the worst two years behind."

The actual results are now given :

		COMPREHENSION	
		West Green School.	"C" School.
Number in class	. . .	32·0	36·0
Average age	. . .	13·2	13·3
Class average	. . .	62·0	71·0
Dr. Ballard's norm	. . .	49·0	50·0
Difference	. . .	plus 13·0	plus 21·0

(Giving at West Green a mental age of 15 years 8 months.)

CONSTRUCTION

Number in class . . .	32'0	36'0
Average age . . .	13'2	13'3
Class average . . .	47'0	45'0
Dr. Ballard's norm . . .	33'0	34'0
Difference . . .	plus 14'0	plus 11'0

(Giving at West Green a mental age of 15 years 4 months.)

ARITHMETIC

Number in class . . .	32'0	36'0
Average age . . .	13'2	13'3
Class average . . .	44'0	66'0
Dr. Ballard's norm . . .	48'0	49'0
Difference . . .	minus 4'0	plus 17'0

The Arithmetic result gives a mental age 8-9 months below the chronological age. The worst school tested by Dr. Ballard was two years behind the normal. Though, therefore, it may be possible to argue from these results that English gains, while Arithmetic loses under the Dalton Plan, it is only fair to remind the reader of what was stated about fourteen of the questions in Arithmetic, and also the fact, a very important one in this connection, that the boys tested were grouped on age and not on mental ability, and were, therefore, in no sense selected boys. All the same, there is a very widely marked difference in Arithmetic between the results of West Green and those of the "C" School.

It is interesting to note, though the figures are not given here, that the individual results are remarkable for the fact that very few boys are far from the average.

Taking these results as a whole, it may again be safely claimed that whilst they give food for

thought, and in some respects for searching inquiry, they give no real cause for dissatisfaction.

Before proceeding further to discuss broadly certain aspects of tests as criteria of success or failure of organisation under the Dalton Plan, it may be as well to refer to such results as have been made available from other schools which work on the Dalton lines. One of the most distinguished schools of this kind is the Tiffin Boys' School at Kingston-on-Thames. On October 26, 1923, the Chairman of the Secondary Education Sub-Committee reported to the Surrey Education Committee* the result of the year's work at the Tiffin School as revealed in the recent London Matriculation and General School Examination. In moving his Report he said the headmaster (Mr. T. Dean, M.A., M.Sc.) had gone very carefully through the results and furnished an analysis of them. In nearly all the subjects, the percentages were, at least, equal to those of previous years or even higher—in the Mathematics markedly higher.

“When,” said the Chairman, “the Dalton Plan was introduced they were afraid that it would lead to a slump in examination results, and they would not have been surprised if that had taken place. But exactly the reverse has happened, and, in spite of the failure in written French, he thought they might rest perfectly satisfied that they were on the right road in making that educational experiment. The results had more than justified their adoption of the Dalton scheme in the school, and it was very gratifying to the Headmaster and his Staff, who had worked hard to introduce it, that the results should be so good. Of course, experience

* *Surbiton Times*, November 2, 1923.

has led to some modifications in the Plan, and it was quite right that the Headmaster should be alive to the necessity for such modifications, as pure Daltonism must be adapted to meet local circumstances. Some of the parents were afraid that they would be let down in the examinations, but, instead of coming down, they were triumphantly successful, save in that one subject (written French), and they meant to go on and do better in the future."

The percentages were very striking, as the following table shows :

Subject.	1921.	1922.	1923.
English	61	79	80
History	74	69	83
Geography	60	48	53
Written French	37	80	22
Oral French	29	82	74
Written German	9	25	60
Oral German	45	69	75
Arithmetic	76	82	93
Mathematics	59	49	67
Heat	25	64	64
Electricity	*	71	68
Chemistry	59	61	68
Number reaching distinction standard }	35	48	56

TABLE 8.

It will be seen that, on the whole, the adoption of the Dalton Plan had not here impaired the educational efficiency of the school as judged by the results in external examinations.

* In 1921 the paper in general Physics was taken instead of two separate papers.

There were 55 boys presented for examination as compared with 57 in 1922, and 56 in 1921.

“ They were afraid that it (the adoption of the Dalton Plan) would lead to a slump in examination results.” This statement might well be placed alongside one made by the late Miss Bassett, of the County Secondary School, Streatham, in November, 1923. “ Fears had been expressed,” she said, “ that the results in public examinations would be very poor.”

She admitted that during the first two years after the adoption of the Plan, the examination results at her school were not so good as in the previous years, but in that year they had beaten their previous record both in number of passes and in number of distinctions.

Speaking in December, 1922, at a meeting of the Froebel Society and Junior Schools Association, and reported in the *Times Educational Supplement*, Miss J. M. Croal, B.A., Headmistress of the Green Secondary School, Isleworth, where the Dalton Plan was in vogue, said : “ To judge results at the present day is almost impossible, but we have had sufficient encouragement from our University results, which, last July, were the best we have ever had.” * She went on to say that the University Report spoke of improvement all round in almost every respect, and it concluded with the remark that the creditable number of distinctions, and the few instances of low marks in any subject, spoke well for the efficiency of the teaching. Miss Croal continued :

“ We were agreeably surprised with these results, and we had been agreeably impressed with the sensible, womanlike way in which the girls had set about revision

* See *Times Educational Supplement*, December 9, 1922.

in the several subjects required for the examination—a pleasing contrast to the wild rush of previous years. One girl," she added, "who had been rejected in examinations in Arithmetic, term after term, got over 90 per cent. of the marks at the Spring examination."

Other known results are as follows :

(a) Girls' School (Elementary) in a poor district, where only a small proportion of the children wish to take examinations. The Dalton Plan was started here in 1922 :

	Secondary Scholarships.	Central.	
1922	. . . 2	3	pre-Dalton year.
1923	. . . 0	0	} Dalton years.
1924	. . . 4	1	

The figures for 1923 will cause no surprise to any one familiar with working the Dalton Plan during the first 6 or 12 months. The headmistress states that she feels convinced that the results of the half-yearly examinations held at school are distinctly better since the Dalton Plan of working has been adopted.

(b) At another Elementary School, in another part of the country, of fifteen scholarships awarded in the county, eleven went to this school. The head of the school adds (June 6, 1925) :

"As far as we are concerned we have not found any falling off in the efficiency of the school, as tested by external examinations, and I am convinced that the herd instruction simply prepared a child to meet the same situation whenever it occurred. It did not train the scholars to meet the new situations."

(c) At another elementary school in the west

of England, where the Dalton Plan had been in operation, thirteen scholarships were secured.

(d) From another and quite different type of school—what might be termed a “Finishing School”—similar evidence comes. In this school, the curriculum, which is chiefly arranged for girls who are either specialising, or hoping to do so, is of rather an elastic nature, which makes it difficult to give statistics :

“But,” says the headmistress, “we have public examinations throughout the school. The Juniors work upon the P.N.E.U., with its little crams, and above that, which is a ‘Sub-Dalton’ room, we have three grades working for the College of Preceptors’ Examinations—the only public examinations which can be held on our premises in the grades we require. Girls, who have passed through these, may then take the Cambridge or Oxford, and many do so, but we find a large number specialise instead, upon Domestic Science, Art, Elocution, Music, etc. We have been very successful in all these subjects, and we feel quite convinced that our general average of examination results has risen some 50 per cent. since we adopted the Dalton Plan in 1921.” She adds: “I think you will understand there are so many valuable factors, including great freedom of choice among the girls, that it is practically impossible to dissect the results in such a manner as to give statistics of any value. I cannot tell you, however, how much we appreciate the advantages of the Plan. It has been of the greatest benefit to us all, and I believe the good it has done is quite incalculable; it is so simple and yet involves such a radical change in the mental attitude of teachers and pupils. The girls themselves are its avowed advocates, and I am convinced that the wishes of the children will eventually overcome any remaining objections made

by very conservative teachers and the system will be universally adopted."

(e) From India (Assam), the Inspector of Schools for the district, G. W. Small, Esq., M.A., writes as follows :

"After some experimental work in Sylhet Government High School, we started the full Dalton Plan in four upper classes of the school (8 sections) in January, 1923. The results in the Calcutta Matriculation Examinations were rather remarkable. All the boys in the top class, 56 in number, were sent up, 54 passed. The average mark was over 60 per cent. Three boys from this school were in the first six for the Province." He adds: "Apparently the Plan has no ill effects on examination results, though, of course, that is not its main object."

(f) Mr. Frank Shann, M.A., Headmaster of the Trinity Grammar School, Kew (Victoria), whose booklet on *The Dalton Plan in Australia* * will be referred to later, there states :

"Our experience with the first term examination of 1924 leads us to the conclusion that, even in the matter of preparing boys for examination, the Dalton Plan is likely to prove effective."

One does not offer these results as evidence that the adoption of the Dalton Plan will inevitably produce good results at examinations. To be quite frank, results vary and for good reasons. What one is desirous of showing is that the new social efficiency which the adoption of the plan brings about need not, and does not, of necessity or in fact, impair

* *The Dalton Plan in Australia*, Frank Shann, M.A., Dip. Ed. (Ramsey Publishing Company, Melbourne).

educational efficiency as judged by the results of tests and examinations.

After all, one is entitled to ask if examinations of the familiar type, and such as are referred to above, are the best, as apparently they are the only methods of testing used nowadays, or for assessing a school, or measuring the progress of its pupils. Examinations, at their best, are liable to cramp originality, adaptability, and initiative. "Examinations are certainly useful as tests and they do no harm to the average healthy pupil provided they are taken in his stride and are regarded as a means to an end. But if they are regarded as ends in themselves towards which the course must lead they are calculated to reduce originality to a minimum, to repress individuality, and even to lead to a mistaken conception of life itself."* There is much that might be said on this subject. Perhaps the most obvious thing that can be said is that, at present, examinations of some kind may be unavoidable because there is, as yet, no efficient and reliable substitute. All, therefore, that can be done is to try and mitigate their evil and prevent disastrous consequences to children arising from them.

Examinations and the whole history of them are bound up with the development of the old methods of teaching, and a brief discussion of them is not alien to our subject. It may be said that out of the failure of the class system arises the tutorial system, or the system of education by "coaching." Here the teacher takes two or three by themselves. All allowance is made for individual differences in

* Bergson and Education, Dr. Olive Wheeler, p. 61.

scholars, and, so far as examinations are concerned, the success is remarkable. But the fault here is that the real problem of education is eluded rather than solved. The coach tends to do everything, the pupil nothing. The better the "coach," the worse the education. This is always the paradox of education, and it applies to all its "helps." Always, the better and the more efficient the "helps" are, the less effort the student has to make, and the less efficient the education tends to become. The tutorial system became more and more popular as examinations became more and more dominant. It is, *par excellence*, the examination method. Its failure, however, has given rise to the method of solitary working. The question of home lessons, or of its extension—the Dalton system, and to some extent the Project system—becomes insistent the more people feel that education is valuable and efficient, only in so far as it calls forth effort, research, persistence on the part of the scholar.* To make education really a training, or a discipline, the pupil must be deprived of many of the clever helps of to-day—the clever test and the even more clever teaching—and must be thrown back more on his own resources, and made to fight out his difficulties for himself.

The ordinary idea is that examinations are theoretically bad but practically good. There is probably more truth in the opposite. They may be theoretically defensible, but practically they are almost always bad. Theoretically, we cannot do without them. Practically, they are the curse of the University and of almost all our Secondary

* See also *Hindu Times* (Madras).

Education. They produce the examination character, which works merely for marks, results, prizes, professional success; the examination mind, which can cram up knowledge for a month, and then forget it immediately afterwards; the examination method, which neglects and despises all teaching, all discipline, all gestation, and the time element in education, in order, by a spurt at the end, to score a spurious success. The true honours' men of our great schools and universities, of course, are not like that. Their minds are not mere buckets to be filled and emptied. With them, time and teaching are of the essence of the contract. But to the mass of the ordinary average pass-men, examinations are a great evil. All this so-called education becomes a mere question of "tipping" of questions, a cleverness in not being "caught out," a study of the examiner's peculiarities, and a dodging of difficulties. But how, in theory, can we do without examinations? They alone in the estimation of the public can test the work of the teacher and of the scholar. They are with it the crown of our educational system. Average human nature, they say, is so lazy and unconscientious that without examinations ahead it will often not do its job, and when the examinations are on, it perverts and abuses them. . . . In addition, who can find an examiner who has the competence to set a fair paper and the time to examine it thoroughly? All this is in criticism of examinations in the higher schools.

The following extracts from an article on Examinations, which appeared in the *Times Educational Supplement** and quoted here at considerable

* *Times Educational Supplement*, December 8, 1923.

length, are an important statement of great educational value. The substance of the article applies chiefly to examinations in elementary schools.

“ Broadly speaking, there has been in the elementary school a struggle for supremacy among material and spiritual values. And the general tendency has been to pass from the material to the spiritual. Half a century ago it received a disastrous set-back. A narrow and formal curriculum, virtually confined to the three R's, was imposed upon it by the Revised Code of Robert Lowe. Elementary education robbed of its cultural content had reached its lowest, its most meagre, its most beggarly stages. The story of elementary education from that day is a story of struggle against payment by results, against annual examinations, and against the formalism that tends to grind the joy out of the children and the soul out of the school.

“ The victory was finally won thirty years ago. To-day the school curriculum has covered the bare bones of the three R's with a fine healthy covering of flesh and blood.

“ Though one might imagine that those who believed in the old regime were all dead, and the regime itself dead and buried beyond fear of resurrection, he may be mistaken in the light of the attempts being made to-day to reinstitute an examination in the elementary schools, not for all classes, but for children of eleven plus in order to apply the principle of ‘ minimum attainments.’ It will have been noticed how the statistics in connection with the Intelligence Tests described above cluster round the ‘ Average,’ never with ‘ minima.’ Statistically, there is no such thing as a minimum attainment. It is as well, however, to attempt to recognise the argument of those who would reimpose the examination. It is this—Teachers are paid a huge salary by the community, and it is the duty of the

community to see that it gets an adequate return for its money. The best way to discover this is by examination, by teaching all children of a given age, and find whether they reach a certain standard in the 'essential' subjects, English and Arithmetic. We (they say) have placed that standard reasonably low, and called it a minimum. It is not the minimum of what the children actually know (that we have not tried to discover), but the minimum which we think the children of that age ought to know.

"The practical result of this kind of thing is obvious to every one. Education is back in the 'seventies. Spelling and arithmetic are absorbing all the life-blood of the schools. The cultural subjects, the really 'essential' subjects, are stamped out. A deadly spirit of rivalry is abroad. School is pitted against school, class against class, teacher against teacher. Worse than all, the atmosphere has entirely changed. Fear haunts the school like a grisly spectre. For the teachers' reputation, no less than his bread and butter, depends upon his producing certain results with no regard to the raw material on which he works. And no school ever did, or ever can do, good work under the influence of fear, although the work often seems to be good to the man who does not look beneath the surface and fails to distinguish between the learning that is lumber and the learning that is vascular and vital.

"To crush out what is fine in education is criminal and blundering. It is blundering because even from the standpoint of those who support these examinations it fails in its purpose. It fails to produce in the fullest measure that limited type of efficiency by which the supporters set so much store. And it fails because it ignores a natural law—the law of distribution of natural abilities. It has been abundantly demonstrated by the application of tests, far different in kind, in intention, and scientific precision, from those suggested by the

same supporters that a group of children of the same real age differ widely in mental age, they differ widely in the level of intellectual development they have reached, and consequently in the degree to which they respond to educational influences. To expect children of eleven to reach the same standard of attainment, whatever that standard may be, is as unreasonable as to expect all children of that age to reach the same bodily weight or the same physical status. The nearest approach to stability of standing known to psychological science is to be found in the average. But even the average is only relatively stable. Even that varies from group to group, and between school and school; the difference is sometimes amazing. Between the average intelligence (by intelligence meaning the intellectual background upon which the teacher has to work) of a school in the best part of a large and prosperous city, and the average intelligence of a school in the worst part, a wide gulf stretches—a gulf of three or four mental years. To fix a minimum common to the two schools is both practically and theoretically an absurdity.

“It will be seen that there is nothing in common between this movement to re-establish examinations and the mental test movement. While the former says the children are the same, the latter says they are different; while the former cultivates disabilities, the latter cultivates abilities; while the former makes for drive and drill in large masses, the latter makes for individual work and a careful fostering of natural aptitudes; while the former gives the dull child a sorry time and the bright child a slack and easy time, the latter aims at discovering the work that may be most joyously, and therefore most profitably, pursued by all children.

“One of the principles of sound examining is that an examination should not control the teaching, but

should be controlled by it. It should not lead, but follow. The school certificate examination of the Universities tended to stereotype and mechanise the work of secondary schools. In fact, it is quite impossible to gauge the efficiency of individual schools by a single examination—and that an attainments examination directed and controlled from a central office.”

It is not without significance that at the Annual Conference of Educational Associations held in London this year (1925), the subject of the Presidential Address delivered by Dr. E. A. Gardner, Vice-Chancellor, University of London, was “Examinations: Their use and abuse.”*

Professor Gardner said the examinations might be regarded as designed for three main objects: (1) As a standard and incentive; (2) As a qualifying test; (3) For selection and competition.

Discussing each of these, the speaker said the first object was the ideal of the nineteenth century, and of the old University of London, also of the College of Preceptors, and Oxford and Cambridge ideals. Though it had done much good in its time in formulating and organising study, twentieth-century reaction against it was natural. Its uniformity was cramping. The initiative of the teacher was hampered. Candidates were taught what they were to be examined in, instead of being examined on what they had learnt or been taught. All universities now provided teaching, although their examining scale was retained.

Examinations as qualifying tests, the speaker continued, were necessary for schools and universities to show the fitness of the candidates for the

* See *The Times*, January 4, 1925.

courses. The standard of such examinations should not be too difficult, for if it were, many good students would be debarred from a university education by failing to pass the examination. Professor Gardner then went on to refer to the number of rejections in the Entrance Examinations for Oxford, Cambridge, and London, and, while not committing himself to any reasons for the variation in the number of these rejections, said that in the present state of things many students were excluded to whom a university course would be most advantageous.

“Little,” he proceeded, “was to be said for the examination for the purpose of selection and competition, except as an alternative to the old system of patronage by which the Civil Service, for instance, had been recruited, but it was difficult to suggest a satisfactory substitute for it. One of the evils was that it produced in schools, that prepared for entrance examinations and scholarships, a tendency to work up to that point as an end. This led to over-training, with the result that the boys reached a higher standard in the subject in which they were to be examined than they ever attained to afterwards. It was difficult to defeat the examiner.”

He (Dr. Gardner) knew cases of well-trained university students, with high degrees, who failed to pass for the Civil Service, but who, after a time, with Civil Service crammers took a few special subjects and got through successfully. General training had no chance against cramming. Nothing could better express the wide divergence between what is, and what ought to be, than Dr. Gardner's distinction between examinations as a qualifying

test and examinations for selection and competition. There is a real danger in the elementary schools of examinations intended for qualifying tests becoming examinations for selection and competition, and the results being used as arguments for or against the newer developments of educational practice.

Quite recently (1924) the Consultative Committee of the Board of Education issued a report on "The Differentiation of the Curriculum for Boys and Girls respectively in Secondary Schools."* The following recommendation appeared in it: "That in girls' schools, the presence of external examinations which is, in our opinion, responsible for so much over-teaching, and for the unduly passive attitude of many pupils, should be relaxed wherever possible." It is also stated that the matriculation requirements of certain universities, which at present determine with undue rigidity the curriculum of the upper forms, both in boys' schools and in girls' schools, should, in the interests of freedom, be relaxed. Examination results are certainly no criterion of the effectiveness of one school as compared with another, and examinations are nearly always at fault as a method of assessing capability.†

Closely associated with the question of examinations, indeed, the very fount and origin of much of the criticism of educational experiments in elementary schools, is the question of scholarships. Attempts are made in certain quarters to endeavour

* H.M. Stationery Office.

† See *Bergson and Education*, Dr. Olive Wheeler (Longmans, Green, & Co.).

to apply to the Dalton Plan the test: Does it produce scholarships? After what has already been said about examinations the reader would possibly be prepared to allow the question to pass by default as one that from the educational point of view is as unnecessary as it is futile. It is as well, however, to face the question for what it is worth in this connection. What is the present situation with regard to scholarships? The number of free scholarships awarded throughout the whole country is surprisingly small. The percentage of admissions (compiled from figures available on January 31, 1919) of children from public elementary schools into grant-earning secondary schools, junior technical institutes, and similar schools, to the number of children in public elementary schools between ten and eleven years of age is 9.5. There is reason to believe that it is not much, if at all, higher now. A Departmental Committee on Scholarships and Free Places estimated that at least 75 per cent. of the children who attend our elementary schools are capable of profiting by secondary education, but only about 10 per cent. of population received such advanced education, and, each year, at least 21,000 children are debarred from receiving secondary education on account of insufficiency of free places and general lack of accommodation.* The writer of *The School for John and Mary* states that:

“Every year 60,000 children leave the London County Council Elementary Schools. The authorities label 10 per cent. of these as being of ‘exceptional

* See address of President to N.U.T. Conference at Oxford, *Schoolmaster*, April 17, 1925.

ability,' and gives them scholarships for secondary schools, and 'Exhibitions' for Central Schools. According to the authorities, this 10 per cent. is stationary, the average being the same from examination to examination, and arrangements are made to 'place this 10 per cent.' '*

The position in a district well known to the present writer may be taken as typical of numbers of other districts. Every year about 2500 children reach the scholarship age. The scholarship tests for free places are given to all children of 11 plus, unless their parents state in writing that they do not wish the test to be taken by their children. Roughly, about one-half the children are withdrawn in this way. Those withdrawn are by no means all of them dull children. Many of them are withdrawn on account of the straitened circumstances of the family, or inability to face future financial worries, and many of them are bright and promising children. The remaining 1200 or so go forward and may be regarded as being desirous, though not all are capable, of receiving further instruction. The actual number of places in secondary schools for which these compete is seventy.† That is to say, only one in twenty can be accommodated in the free places. (Some, of course, go forward as fee-payers, but the number of these is not large.) It is quite obvious that the examinations must be selective and not merely qualifying, and, obviously, only those of exceptional ability are taken. Unless the boys and girls of exceptional ability are pretty widely scattered over an authority's area, it is

* *School for John and Mary*, p. 288.

† This applies only to free places in Secondary Schools and does not include a further sixty or so who go on to Central Schools.

plain that some schools in that area can never secure scholarships whether the schools are run on the Dalton or any other plan. It frequently happens that where schools are intent on securing scholarships at all costs, all sorts of vices such as have been referred to in connection with the higher schools creep into school methods—cramming, over-teaching, intensive cultivation, all of which are distinctly harmful to the child and unfair, should the pupils succeed, to the schools of their later education. The results of such tests cannot possibly measure the efficiency of one school as compared with another. The obvious thing to be done, of course, is to make greater provision for all the children who, admittedly, are able to profit by further education and to make the progress from one type of school to another as much a natural process as possible. The former is already being done in some cases, notably in Bradford and Durham. What can be done in the latter case is well illustrated by the recent abolition of the Intermediate Examination in the Scottish schools.

This is the appropriate answer to those who propound the question about the number of scholarships the Dalton Plan produces. It is not so much a question of "How many scholarships does the Dalton Plan produce?" but what provision is made for the vast number of children, who profit by the Dalton Plan, to pursue their studies in advanced courses at the time when they can profit most by them?

"Our Education Department has recently announced in a boastful manner that statistics prove that the

children of London Elementary Council Schools are one year ahead of the school children of New York and Paris in the matter of intelligence. If this is true, as well it may be, what might not London children do, not only the 10 per cent. of 'exceptional ability' but the 80 per cent. of ordinary ability, if they were given the advantages of a really democratic system of State Education? " *

The question, therefore, of how many scholarships the Dalton Plan enables one to produce is, apart from the examination evil, entirely beside the mark.

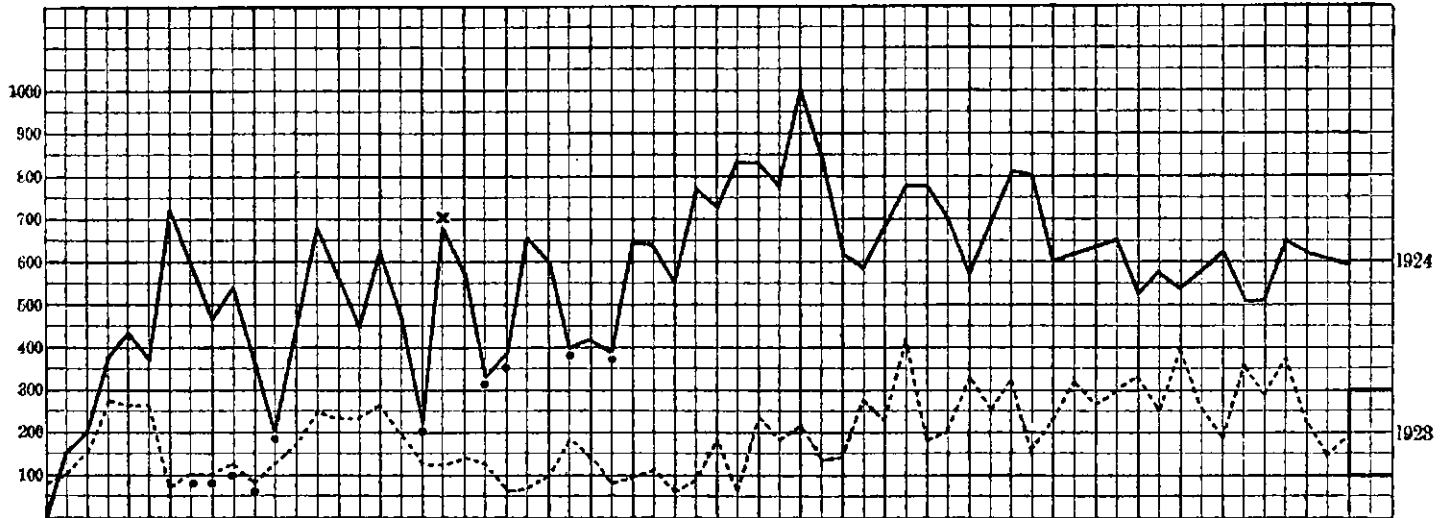
Perhaps, after all, an undue emphasis has been placed, in what has been written above, on statistics of examinations and scholarships, but the point has been stressed, not indeed to support any theory of examinations as a final test of good work in the schools, not to discuss the problem—a really pressing one—of the organisation of post-primary education in this country, but in order to show that even by those methods of testing, rather than suffer under the Dalton Plan, the educational efficiency is not only maintained but is, in many directions, increased. This efficiency is often such as to defy measurement by examination results or tabulation in schedules. It discloses itself in innumerable ways that can only be regarded as of tremendous value in the making of character and citizenship.

Examinations, then, are not the only tests, nor, perhaps, are they the proper tests to be applied. Dr. Lucy Wilson, of the Philadelphia High School for Girls, U.S.A., has applied the Dalton Plan to her school of 2000 girls. One of the most striking

* *School for John and Mary*, p. 290.

EFFECT OF THE DALTON PLAN ON THE LIBRARY OF THE SOUTH PHILADELPHIA HIGH SCHOOL FOR GIRLS

NUMBER OF READERS...	SEPTEMBER 12...	DECEMBER 15	1923	10,444
" " "	" " "	" " "	1924	32,414
	• Religious Holidays ... Jewish		x Beginning of Time Freedom	



results which followed its adoption was the increased use made by the girls of the school library. The number of readers from September 12 to December 15, 1923, was 10,444. This was before the adoption of the Plan. During the same period in 1924, after the Plan had been adopted, the number of readers had risen to 32,414. The details are set out in the accompanying diagram, which is reproduced here by permission of Dr. Wilson.

In assessing "results," facts like these should be given their due place, and not least, because they apply to all children, and are not confined to those of "exceptional" ability.

CHAPTER IV

A DAY IN A DALTON SCHOOL

MANY critics of the Dalton Plan imagine that a school run on Dalton lines must be a perfect nightmare of disorder and even confusion. They know the principles on which the Plan is based—freedom to move, to choose the subjects at which to work, to talk with teachers, with their own companions, and so on—but they are utterly at a loss to see how any school could be conducted on such lines, and, at the same time, make any pretence to order and discipline. It is difficult, indeed, for any one who has spent any considerable time under the old system, and with the conventions of fifty years of such teaching hanging about them, to detach themselves from what has become the accepted thing in school organisation. It is difficult in any sphere of life and action to cut oneself adrift from what he has come to regard as his moorings. Classes and class lessons have come to loom large in a teacher's life, and have, indeed, been regarded almost as the "ark of the covenant." Now a change, more widespread than its critics realise, has come over the schools, and the teacher's part in education is not regarded, as it used to be, as the one duty of preparing and

giving lessons all day long. Neither is it believed that the only way for a child to obtain and assimilate information is by being herded into classes. There is indeed a part, perhaps a large part, for the teacher to play, but there is also a part for the child to play. And it is the purpose of the Dalton Plan to make the child's part as natural and as sensible as possible, by first throwing on to him a part of the responsibility of his own education, and then by arranging for him to perform his part under such conditions as will enable him to express himself, and acquire his knowledge in his own way. This, after all, is the method of development of the pre-school days of childhood, and it is natural. Even order and discipline, under Dalton conditions, are not imposed from "above"; if, indeed, they are to be real and effective, they must grow out of the conditions in which a child lives and be the direct result of that living. It is well to remember that order without liberty is tyranny, but liberty without order is chaos. Discipline never, of necessity, means an austere code of rules imposed from without: it may be, and indeed it is, if it is the best form of discipline, self-imposed. Such discipline implies freedom, but it is an orderly freedom.

One of the best ways of appreciating the Dalton Plan is to try and visualise what goes on during a typical day in a Dalton school. The first thing that happens in the morning in the writer's school is that the school assembles as a whole, and then disperses to the various rooms for registration, to be followed by a Scripture lesson.

The lower standards—Standards II, III, and IV (about 120 boys)—pass to their classrooms, and

spend their time in the orthodox way during the whole day. It is in these classes that foundations are being laid on which to build later. At present, these children do little individual work of the type done by the older children, mainly because the assignments of work in use are much beyond them, though simpler assignments might very well be tried with these small children, and because, in these classes, the weapons are being forged which will enable the possessors of them to use them to great advantage later on. The classes from Standard V onwards, that is, from the age of about ten upwards, now known as Forms, go to their form-rooms, where as stated they are registered and afterwards have their Scripture lesson. Thus, the school has an upper and a lower part. The Forms are each in charge of one of the subject masters, who for registration and class purposes is also the form master.

It should be pointed out that the word "form," and not "standard," is used because the latter term implies that the majority of children in that group have reached a certain standard of work, whereas the form group is based almost entirely on age, irrespective of mental ability. There may, as many have suggested, be some disadvantage in this, as it must be difficult to give the oral lessons, shown in the time table, to a group which comes together solely on the basis of age, and not on the basis of the completion of assignments. And this applies to any, or all, of the subjects when treated orally. But the disadvantage is not by any means so great as some critics of the Plan imagine. These critics, especially those who

have never taken part in a Dalton experiment, and like Moses, view the land afar off, can scarcely believe it possible to give oral lessons under such conditions, and feel that such conditions must constitute a practical difficulty. This view, however, is not confirmed by experience. If the experiment covered a longer course than four years there might be some force in the criticism. As a matter of fact, the position is—that the teacher and the pupil are pursuing the same syllabus of work along different but parallel paths, and undoubtedly it is a rare occurrence that in a class lesson the teacher and pupils, in the pursuit of their work, would be moving along at the same rate, and therefore keep abreast of each other. It might, however, happen. The pupils are, therefore, either behind the particular point in the syllabus involved in any particular class lesson, or they are ahead—most frequently they are behind. What really happens, then, under these circumstances, is that those behind will probably receive from the class lesson a great deal of help which will be of value when they reach that point in their assignments, whilst those ahead are revising and reviewing past work. It should, however, be pointed out that a teacher, experienced in Dalton Plan work, who has been dealing with the same set of assignments for two or three years, will have collected information as to the difficulties of those assignments, and, as they arise, deal with them in class lessons. Sometimes, however, teachers deal with general matters which affect the work of all pupils in a group; for example, in Geography, with climate, winds, and so on. As a rule, the wise teacher will note the difficulties as

they crop up and either make a note of them, or deal with them at once. The matter is referred to here to dispose, as far as may be, of a criticism which is generally made when the Dalton Plan is being considered in an academic way by those who toy with the idea but fear to launch it on their schools.

The Scripture lesson ended, and pupils in the upper school having made up their minds as to the subject they will study for the next hour, at a given signal move to the various subject rooms. Here, again, many of the critics who are "outsiders" scent trouble, for they find it difficult to believe that this change from room to room can be effected without great confusion, if not chaos. But nothing of the kind occurs. In the writer's school, the change is made by 220 or 230 boys, without undue noise, in from one to two minutes. The ease with which a settling down to work takes place is very refreshing, and is contributed to very largely by the fact that each boy has clearly made up his mind where he wants to go, and also because he carries about with him the materials (pen, pencil, exercise books, etc.) he may require for his work. At a convenient opportunity he helps himself in the room, to the particular assignment on which he must work. This he does either as he passes into the room, the assignments being typewritten or printed and placed near to hand, or he will be supplied with it by the teacher.

It is worth while noticing what now is the position in each subject room. The ages of the boys working on the Plan vary from ten upwards, and as each boy's movements are governed by the

subject he desires to work at, it is the boy's desire to work the subject that determines the number in the room, and not his age, his form, or his mental ability. He goes to a room because there the subject he desires to take, at that moment, is being worked. The number who go varies, of course, from hour to hour, and from day to day. What actually happened during one period of twelve working days can be seen from the table on p. 35. Boys are not compelled to remain there for the whole hour, but may change their room whenever they so desire. This is done, experience shows, only when the work is completed, or if the boy is fatigued. At no time has the number who changed during any free-study period during a whole day exceeded twenty, and as the subject rooms are close together these changes bring no inconvenience to any one. Should a room be full, the boy must go elsewhere. In the writer's school, it is possible however, to extend the accommodation of any room by the use of chairs and collapsible tables. This arrangement ensures that any boy who finds himself with only one subject to complete need not be sent adrift, but can be taken in, in order that he may finish his work.

Having within it boys of ages varying from about ten to fourteen plus, the room presents an example of that little community of which Miss Parkhurst makes so much in her exposition of the Plan. Boys may, during the day, be continually rubbing shoulders with any of the two hundred-odd other boys who are also working under the Plan, and are experiencing a nearer approach to the conditions of the life of the greater world outside which the vast majority of them will have to face

at the age of fourteen. This provides a contrast with the arrangement by which 40 or 50 boys are kept together often with the same teacher for a whole year. Boys also get together in groups, each group dominated either by a community of interest in the particular work they are all doing, or by its difficulties, or by the fact that friendship for one another brings them together. The groups act and react on each other, and the result of this interaction is of the greatest value to the boys composing the groups.

During the hour's work in the room, most boys get well down to their task. Some, however, will wish to have the work they have so far completed looked at by the subject master, who is at their disposal for this purpose. Whatever corrections the boy should make are made before he proceeds further. While the master is marking this work, other boys approach him for advice in a difficulty, or for information. Should any boy have completed the month's work in the subject, the master will initial that subject on the boy's card and date it. It is sometimes necessary, at frequent intervals, for a subject master to compare the names of the boys who visit his room with those on his own register of names, in order to ascertain if any boys are missing his subject for an undue length of time. Should he find any weakness in this respect—some subjects are distasteful to some boys, and are, therefore, liable to be avoided for so long as possible—he will send for these boys, and do what is possible to urge them to pursue the subject as soon as they can, and to complete the work in it. It is not desirable to allow boys of this age to avoid a

subject simply because they do not like it, for that would be creating a condition of affairs that would be very different from that of the outside world as at present constituted, where they will, on many occasions, have to face tasks that, in themselves, would not be altogether attractive.

The hour's free study being ended, boys enter recess for about ten minutes. At the conclusion of this recess, they return to form rooms, or go elsewhere in groups to engage in twenty-minute lessons in subjects like Drill, or Singing, or Mental Arithmetic, that cannot easily be Daltonised. Sometimes a subject master will find in this short period an opportunity of using that time to deal with some general weakness he has found in his subject during the course of his marking of boys' exercises. There is no limit to the use that can be made of this short period. The writer has often been asked to explain the reason for so much Mental Arithmetic appearing in the time table.* The explanation is simple. During the first year of the experiment, Arithmetic showed less advance than was shown in other subjects, and in order to try to counteract this weakness, the fullest possible use was made of these short periods. Latterly, the time table has been modified, and one short lesson in formal English for each age group has been introduced, thus lessening by that amount the time given to Mental Arithmetic. But all these arrangements and rearrangements are simply evidence of the fact that the time table is made to become the servant and not the master of the work, and that Dalton arrangements are by no means stereotyped.

* *Individual Work and the Dalton Plan*, pp. 36, 37.

When the time for the short lesson has expired, a change is again made from the form groups to subject rooms for another hour's free study. The change is made with the same precision as the earlier one, and the work in the rooms is carried on in very much the same way. It is curious, however, how the personnel in the rooms changes, as only those boys wishing to continue the study of the subject they were working earlier, will again be found in the same room. There will be a new community which allows further play for that interaction of groups referred to above. At the close of this period of free study, which is the conclusion of the morning's work, the boys, in a very natural way, pack up their materials and find their way home.

The afternoon session opens with all boys, mainly for the purpose of registration, in the subject rooms in which the appropriate class lesson, which is to follow, is taken. For example, if the lesson for Form I is to be Geography, that form will go at once to the Geography room. The form masters remain there for ten minutes, during which time the boys are occupied in entering in their notebooks certain observations they are encouraged to make daily. These include barometer and thermometer readings, noting the direction of the wind, and so on, which, if carefully kept up throughout the year, give a boy some rough check on certain facts he learns in connection with Geography. It is necessary, for the purpose of registration, that the masters change rooms, in order to register their own forms. When registration and observations are completed the masters return to their

own subject rooms for their class lessons. The class lessons occupy the next hour. As there happen to be five forms the subject master will take each form each day in rotation, until in one week he has completed his lessons with all Dalton boys. As, also, there are five subjects in which class lessons have to be given, there are five subject masters giving class lessons in different rooms at the same time. For this hour, therefore, there is little, in outward appearance, to distinguish the organisation of the school from that of the old method. There is, however, a difference in the use that is made of this hour by the subject master, from what normally takes place under the old method of class teaching. It is difficult to attempt to describe this difference, as it is not stereotyped, and varies with different subject masters. With those masters who have moved little from the old ways there will be small difference from the old method of class teaching ; with those, usually the younger men, who have moved further, the difference will be very marked. The lesson will be much more in the nature of a conference, and, whilst it will move clearly along the lines of the syllabus of work for that particular group, it will centre round the heart of the assignments based on this syllabus, and, by careful preparation, anticipate whatever difficulties are likely to be encountered. On these lessons depends very much of the success or failure of much of the work undertaken personally by the boys.

It will have been noted that six subjects have been Daltonised, whilst in only five are class lessons taken during these hour periods. The subject not so treated is English, but it must not be concluded

that no class lessons at all are taken in that subject. Mention has just been made of the fact that some of the short periods after recess are used for the purpose. But what becomes of the English subject master during these hour periods when he has no form to take? The fact is, this master is the one man on whom the greatest burden of marking, in connection with the Plan, falls. The average output in his room during the three hours per day while he is supervising the work, is very great, perhaps four to six times greater than under the old method. What really happens, therefore, is that he uses all the time during the day, outside the time he is actually supervising the work of his room, for the purpose of marking, and with a careful use of this time he is generally able to complete his task inside the school day of five and a half hours.

At the close of the class lessons, recess is again entered upon for ten minutes, after which, short lessons, following the fashion of the arrangements which obtained in the morning, are taken. These over, the forms then disperse to subject rooms to complete the last of the three hours' free study.

There is, therefore, little complication in these happenings; indeed, they take place so naturally as to appear quite the normal thing. To prevent any boy becoming tired of private work—and, after all, no long and continuous concentration should be asked from any elementary school child—it will be seen that the periods of free study and class work alternate. Experience has shown with most children of elementary school age that two successive hours of free study are too great a strain, and that to spend the whole three hours in the morning on

such work would be in the writer's opinion to defeat the end for which the Plan was instituted.

This, then, in a general way, is what happens in the various rooms throughout the day. A few lines might usefully be added pointing out one or two characteristics of some of the rooms which cannot be found in others.

In the Literature room, in addition to what has been pointed out above, a good deal of time is spent in dramatic work, and in memorising and reciting poetry or prose. This is not done, as a rule, by selected boys, but by all boys, because that work is part of the assignments. Dramatic work, and recitation of memorised poetry and prose, guard against the possibility of a too great insistence on written work at the expense of vocal work. Dramatic work is always popular, but where it is original it offers a still greater attraction. It is in both the Literature and the English rooms that a great deal of use is made of the dictionaries, and there the general handling of books becomes habitual. Some criticism has been made of the original poetry that is produced by boys in the Literature room, and doubts have been expressed as to whether it is really original, or whether boys could possibly do this kind of thing in association as, for example, where two boys collaborated to produce a piece of work. Many examples of this kind of work were given in the writer's previous volume.* The accompanying illustration shows those boys, still at school, who are represented in that volume, together with their subject master (Mr. F. M. Moore, B.A.). One does

* See *Individual Work and the Dalton Plan*, pp. 209-214.

not readily understand why it should be regarded as unlikely that two boys could work together to produce a poem, when so much work, in either poetry or prose, is produced nowadays by authors working in collaboration.

The Geography room stands out clearly from the rest of the rooms with characteristics of its own. It is the room, *par excellence*, which allows a special atmosphere to be created. There is so much apparatus in use, and so many maps and diagrams, that to make them convenient for handling by the boys, they must be displayed. The large Comparative Maps of Philips' are those most in use, while, on the creative side, there are, on the walls, both large and small plaster casts of the contours of various countries made by the boys themselves. The accompanying picture of this room, taken by Mr. Maung Cho for the purpose of illustrating an article on the Dalton Plan in a Rangoon educational newspaper, gives a fair idea of one corner of this room. Two boys are to be seen consulting the large-scale maps, whilst there is a general air of work about the boys who were caught in the picture. The adults (left to right) are Mr. H. B. Priest, the Geography master, and author of the "Individual" series of assignments in Geography, covering a four years' course, in Messrs. Philips' series of little books; Mr. S. K. Chatterji, M.A., Headmaster of Bhowanipore High School, Calcutta; and the present writer.

The drawing boys are accommodated in the hall of the school, partly in order to gain what is, in effect, an additional room, so as to be able to carry on six subjects while there are only



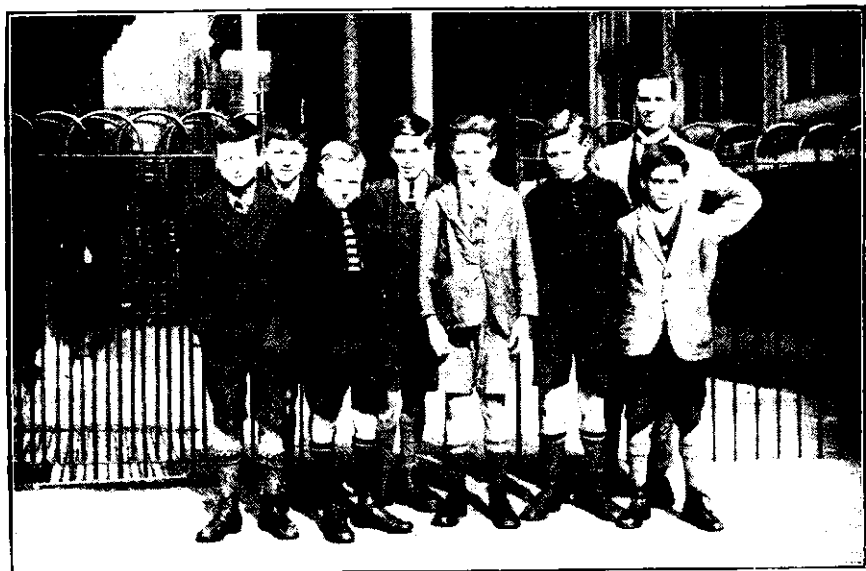
THE GEOGRAPHY ROOM.

[See page 84.]



THE DRAWING ROOM.

[See page 85.]



THE POETS.

[See page 83.]

five classrooms available, but much more because this part of the building, on account of lighting, is by far the most appropriate place to take this subject. Moreover, the space at disposal is ample and gives boys the fullest opportunity of moving about, as can be seen from the photograph of that room here reproduced. The late Mr. F. E. Sharp, author of *Individual Drawing* and *Natural Science*, is in the background of the picture. The change in the aim and purpose of the Drawing now being done at the school is referred to in the next chapter.

Nothing has been written in this review about the day's work in the Adjustment room. The reasons for this will be clear to those who have read the preceding pages. Difficulties of accommodation and staff alone account for its suspension for the time being. On the general question of the establishment of an Adjustment room, the writer is clearly of the opinion that no well-established experiment on Dalton lines is complete without such a room. It is necessary to have a retreat to which the weaker children may go, not as a punishment or a degradation—though there is a danger that ill-informed experimenters may use it for these purposes—but as a place of real help and guidance. The boys who need this help can easily be discovered from a perusal of such a record as is shown on p. 21.

The story of the day's work would not be complete without referring again to the fact that a preparatory Dalton class—a Sub-Dalton class, in fact—is also organised in one of the rooms. Sufficient has been said on another page of the actual organisation of this room. The following note,

however, might be added. The assignments used are of a simpler kind, and are drawn up for four subjects only, corresponding with the four subject tables. In accordance with the suggestions for the allocation of time to subjects made on p. 26, the following is the table on which the units of work are based, and on which the assignments are built up :

Subject.	Time available.	Time for class work.	Time given to pupils.	Length of unit.
English (including Literature)	6	2	4	48 mins.
Arithmetic .	6	2	4	48 „
Geography and History .	4	2	2	24 „
Reading .	4	2	2	24 „
Totals .	20	8	12	2 hrs. 24 mins.

TABLE 9.

The writer's school possesses no workshop or Handicraft room ; neither is there a handicraft centre in the neighbourhood, nor is there a science laboratory. Such practical work as is given is always given under adverse conditions. This is regrettable, because no Dalton experiment can be complete without facilities for individual work in Handicraft and Science. These are pre-eminently subjects for Dalton treatment. The fact that the Dalton experiment can be carried on at all in an old and somewhat unpromising building, is a tribute to the elasticity of the Plan and an evidence that the principles underlying it can be applied in conditions that are not in every sense favourable to Dalton organisation.

CHAPTER V

FURTHER REVIEW OF SUBJECTS TAKEN UNDER THE PLAN

IN Chapter IX of *Individual Work and the Dalton Plan* the author reviewed all the subjects taken in school and gave an outline of such results as have already accrued. He has no wish to cover that ground again except, perhaps, to say that the present treatment of each subject there outlined remains pretty much the same. With regard to Drawing, however, about which certain views and pious hopes were expressed rather than the work then being done eulogised, there has, in this subject, been a change of purpose and outlook. The work has passed into the hands of another master, and what is now being done, is what the present writer has always felt should be done with the subject, viz. that it should be regarded as a language, and that children should be encouraged to express themselves in that language through colour and form as readily as they are asked to express themselves in written composition with other materials. The response has been of a remarkably encouraging kind. Several avenues have been explored in the attempt to get self-expression and individuality. On one occasion boys were asked to

REST.



REPAIRING



ALONG

REST



RAPPAY



- REST -

WENTZ

give some expression to their ideas of "Rest." The medium selected was black paper cut out and laid on the drawing sheet or a brush and black ink were used. The accompanying reproductions show the efforts in this direction.

It will be noticed how the ideas vary. But in every case the variations are due to a complex that governs the whole idea. The cemetery variety of Rest was almost wholly absent, but, where it did appear, it was due to the fact that the designer, though young, had already lost his mother. Of the boy sprawling across his desk, with complete abandon, all that need be said is that it exactly represents the boy who designed the picture. It was his favourite mood in almost every subject except Drawing.

On another occasion, following the study of Walter de la Mare's *Nod*, in the Literature room, some creditable drawings were produced. The outstanding features were a flock of sheep, a shepherd, some poplar trees, and a sunset.

They explain themselves to any one who is familiar with the poem. Whilst they do not convey the philosophy of the poem—a thing hardly to be expected—they convey a distinct image. Other attempts were made to represent "Winter," "The Enchanted Shirt," and so on. The frontispiece of this book is a reproduction of one of at least a dozen boys' attempts to represent (in water colour) "Winter." These form a distinct change from Practical and Geometrical Drawing (good in its way as a handmaid of Arithmetic), and efforts have been made to develop this kind of expression and to work it up into the form of

assignments. The present Drawing-master (Mr. J. Hicks) has prepared for publication a four years' course of assignments in Art work. They are published by Geo. Philip & Son, and set out quite clearly the lines on which this work is now pursued.*

With regard to Arithmetic, the writer sees no reason to alter the views expressed in the previous volume. What he said then in criticism of the teaching of Arithmetic, and of the *kind* of Arithmetic taught, he sees no reason to withdraw. In some respects what he said then may be repeated with greater emphasis.

At the Annual Meeting, June 13-15, 1923, of the Association of Education Committees, held in the Goldsmiths' Hall, London, Mr. A. R. Pickles, M.A., Director of Education for Burnley, read a paper on "Our Elementary Schools: their successes and their failures." † After sketching the type of schooling of the earlier days of elementary education, and setting out some remarkable figures relating to school classification in those days, and pointing to the diminution of the number of children of ten years of age, and over, in Standard I, and the rise in the number of those of ten years, and over, in Standard VII, he proceeded to enumerate the various activities which have developed in the schools.

"The change in school life during the last thirty years," he said, "has been so great as to be almost revolutionary. . . . I venture to say that the Elementary Schools have raised the tone of the nation, have

* The syllabus of these Assignments is shown in Appendix I.

† See Pamphlet Ref. No. 184 (Lee and Nightingale, Liverpool).

refined the homes of our people, have improved the pursuit of leisure, and have generally contributed to an uplift of the standard of living."

Mr. Pickles pointed out that all these new aims and activities have necessarily absorbed time formerly given to formal instruction; and he proceeded to say that "there is undoubtedly a widespread belief that our Elementary Schools are today lacking in certain matters," and asked: "Is the instruction in our schools satisfactory?" In order to throw some light on his question, he quoted first from the 1921-22 Report of a Chief Examiner for County Scholarships as follows:

"There was a good deal of avoidable numerical inaccuracy, and the lack of method was very marked";

Then from an assistant examiner who reported:

"As a rule, the working consists of scraps of calculation in various places on the page, with no word to guide one as to what the calculations represent, and this lack of arrangement is conducive to inaccuracy and slipshod thinking."

Mr. Pickles then goes on to give some actual figures for an area which disclosed the fact that, of 932 pupils who sat for an examination in English and Arithmetic, 14 per cent., or 134, had not a single sum right. All of which looks rather dreadful. The actual tests set, however, were not given. This was a pity, for they would have been of real value in assisting one to form just and fair conclusions. In November, 1920, the *Journal of Education* stated that "the results of the formal examination of selected material from Elementary Schools seem to

imply, either, that we expect too much from the system of primary education, or, that there is something lacking in the methods of teaching." It is not unlikely there is some truth in both implications, but, in the writer's opinion, the facts hardly support the latter. After all, the staffs of schools, in the urban areas at any rate of this country, consist largely of trained teachers, and it is difficult to believe that after years of training and experience they are not capable of doing their work. It is far more likely that too much has been expected, and that efforts to test, at eleven plus, the products of the schools not, in the first place, in the interests of the children themselves, but rather to weed out those for whom places cannot be found in advanced schools, have given rise to examination questions that in themselves are difficult, erudite, and often vague, as a perusal of the questions set at "Scholarship" examinations will abundantly prove. The whole procedure is too often entirely overshadowed by the failure of the authorities to provide sufficient accommodation for those who could easily satisfy a qualifying test. That this is so, will impress any reader who considers the arithmetical examples given later. Surely, the remedy for the faults that Mr. Pickles points out lies in other directions than teaching. As stated in his previous volume,* the present writer inclines strongly to the view, that it is the *kind* of arithmetic set that is wrong, and also that, in the very nature of the conditions under which the tests were given, they were not for the purpose of qualification but of selection. The real remedy, therefore, it must be repeated, lies in the

* See *Individual Work and the Dalton Plan*, p. 193 ff.

increase of the number of secondary school places, a view which is emphasised by the finding of the Departmental Committee on Scholarships and Free Places to the effect that in elementary schools 75 per cent. of the pupils are capable of profiting by further instruction. If the accommodation for advanced courses were greater it would become unnecessary to introduce into arithmetical tests examples, the prime purpose of which is not qualifying, but selective. This matter was referred to in an earlier chapter.

A little over a year ago, the Board of Education carried out an inquiry into the teaching of Arithmetic in elementary schools. No report has yet been issued ; indeed, there is no certainty that any report is likely to be issued.* It can hardly be supposed, however, that such facts as the Board was able to glean from this inquiry will be put on one side and forgotten, and it is possible a report may yet be forthcoming, or, that the facts so gleaned will be embodied for the guidance of teachers in some further " Suggestions."

The inquiry was carried out in the schools by

* Since the above was written the Board of Education has issued a report under the title of *The Teaching of Arithmetic in Elementary Schools* (H.M. Stationery Office). The present writer's surmise as to the purpose of setting the tests proves to have been correct and the Board's conclusion is as follows : " All that can be said after making such comparison as is possible, is that there does not appear to be any falling off in the standard of attainment in arithmetic to-day, especially when it is remembered that the brighter children are now drafted off to Secondary or Selective Central Schools to an extent which was not possible in the past." A careful study, however, of the percentage results set out in the report strengthens the argument pursued here as to the unsuitability for children of much of the arithmetic they are given to do.

means of tests in both mental and written arithmetic. Apparently, certain schools in each inspectorial area were selected as typical, and tests were given to Standards V and VII. The tests themselves were of the type that used to be set over twenty years ago, and they had to be worked in a given time. There was nothing unreasonable, so far as is known, about the conditions under which the tests were given, but the tests themselves were a curious mixture of problems which had little practical value, and sums which contained quantities which rarely occur in common experience. For example :

“ If 30 men or 60 boys can earn £8 5s. od. in a day, how much will 10 men and 10 boys earn in 11 days ? ”

“ A carpet 3·5 yards long and 3 yards 8 inches wide is placed on a floor 14 ft. by 12·5 ft. : what decimal of the floor is uncarpeted ? ”

Of the first, it may be said that such a calculation rarely, if ever, becomes necessary in ordinary life, and of the second, that even if carpets are sold with such curious dimensions, it is certain no one who has to buy a carpet and lay it on a floor ever troubles himself to find what *decimal* of his floor is uncarpeted. Both questions lack reality. It is true they involve certain arithmetical processes in favour of which something may be said, but the questions themselves are completely divorced from life. Arithmetic of this type can have little value to the ordinary school child ; indeed, it becomes a thing apart. Neither can much be said in favour of such sums as :

“Find a fifteenth part of 19 sq. yds. 3 sq. ft. 9 sq. ins.”

If it be necessary for children to understand the processes which types of this kind indicate, it is surely possible to have it done with simple problems of everyday life.

It is difficult to know what was the purpose of the Board in this matter. So much has been said and written about the weakness of Arithmetic in the schools of the country that it is just possible the Board was out to discover for itself whether the subject is as well taught now as it was believed to be twenty years ago. This, indeed, would appear to be the only justification of their giving the same types of work as were set then. But an inquiry on such lines does not lead us very far, when it seems to be the opinion of a rapidly growing number of teachers that the *kind* of Arithmetic taught is very largely what is at fault.

It is perhaps worth while, in discussing this aspect of the subject, to refer to other examples which the writer has come across. The following appeared in an Arithmetic paper a year ago,* and were given to children of eleven to twelve, who were desirous of taking a County Free Admission examination :

“A traveller divided his journey into three equal lengths. After having gone $\frac{3}{5}$ ths of the first length he found that he had still to go 72 miles before his journey would be done. What was the total length of his journey ?

“A grocer has 69 lbs. of tea and $\frac{3}{4}$ cwt. of sugar. From these, he wants to make up parcels each of which

will have in it three-quarters of a pound of tea, and one pound of sugar.

“(a) How many such parcels will he be able to make up? and

“(b) How many lbs. of tea will he have left?”

Here, again, one encounters the same thing as was pointed out in the previous examples—the curious unreality of them. The examiner himself, in discussing the results of the test, of which these two sums formed a part, says of the first: “It proved too complex for a large number of the candidates”; and of the second, “It turned out to be a great stumbling block. This answer (and, indeed, all those dealing with practical (*sic*) matters) fell far behind the merely abstract ones.”

Is it surprising? Does the fact that a lot of figures are centred in a grocer's shop make the problem “practical”? Mr. Bultitude in *Vice Versa* once said, when referring to the bills of parcels that used to fill our school text-books, that “he was disgusted as a business man by the glaring improbabilities of the details.” The only thing that could possibly justify problems of this kind being set to children of eleven and twelve, is that the whole examination of which they form part is a selective one, and designed to exclude as many candidates as necessary in order that the task of selecting the number of candidates required to fill the paltry number of free places offered in the secondary schools be made easier. But it by no means follows that children failing to solve such problems as these are lacking in arithmetical intelligence. Nor does it follow that those who succeed possess

such intelligence, or even initiative. The whole proceeding is perilously near a gamble.

"There has of late," says the *Times Educational Supplement* of March 22, 1924, "been a distinct relapse into the unnatural, artificial 'schooly' method of dealing with things and we need some missionary like John Amos Comenius to recall us to our business."

The article from which this quotation is made dealt with "The Teaching of Arithmetic," and was suggested by the inquiry, to which reference has just been made, that was carried out by the Board.

"There can be little doubt," says the writer of that article, "that with Arithmetic, as with almost every other subject, the greatest hindrance to successful work is the way in which it is disconnected from ordinary life and made a school 'subject.' We forget that Arithmetic is a preparation for business, and make it unreal and impracticable, a thing of the classroom and the book, rather than of the home and shop and street. Boys will do elaborate bills of parcels, and practice, at school, and then at home will hardly be able to check the butcher's bill, or see whether the load of coal has been properly charged for. . . . There can hardly be a teacher who will not admit that children must be taught about this sort of thing if they are to become intelligent citizens."

There is great force in this contention, but the work set in half our arithmetic text-books, and such examples as are set out above, cannot be made to square with it.

More recently a writer in the *Times Supplement* (June 20, 1925) has some wise and weighty words on this subject. He says :

“The narrow ‘bread and butter’ view of Arithmetic teaching which dates from the time when education dealt only with the three R’s has on the whole passed away. A truer and more psychological view now bases the choice of subjects of the curriculum on the study of the main human interests. If Arithmetic is taught as representing one fundamental human interest, it must for one thing be viewed as the beginning, and a part, of Mathematics. The nature of this human interest may be widely utilitarian, or an intrinsic interest in the subject for its own sake. The formal value of Arithmetic we may look on as useful, but incidental, and one far less all-embracing, than the early faculty psychology would have us believe.”

He then goes on to argue that, on the one hand, Arithmetic should lead towards the study of number from a social and economic, though not a vocational, point of view; and, on the other, such an introduction of Algebra and Geometry as would preclude the idea that in school days Arithmetic is “finished.”

“Can room,” he asks, “be found for both these developments, not only in the secondary school, but also in the elementary school? The answer,” he says, “is confidently in the affirmative, and that not by hurrying on the small child of six or seven, or even eight (*pace* the iniquitous Junior Scholarship Examinations), but by being more discriminating in our selection of subject-matter. We need to reject those parts which are relics of the old ‘formal’ doctrine of ‘difficulty for difficulty’s sake’ and closely to scrutinise the order or value of the subject-matter we include. . . .”

Nor does he shelve the question of accuracy.

“There is confusion,” he writes, “in the minds of many teachers as to the relation between accuracy and

understanding. If we take no concern for understanding and simply make for accuracy by formal drill we are turning out pupils who are mere machines : they may work along certain narrow lines providing they are possessed of good memories, but they are upset and put out of gear by any deviation in the form of work demanded. . . . Business people are complaining that school children's education in Arithmetic is worthless because they find the children so inaccurate. The extreme, on the other side, is found in the teacher who aims at understanding and altogether neglects accuracy. The truth of the matter is that understanding and accuracy should go hand in hand : they are both essential and mutually helpful."

The writer then makes suggestions about the order of subject-matter with all of which the present writer is in complete agreement, and in nothing so much as when he says that " In applied Arithmetic the problems set should be real and related to the circumstances of the child."

The present writer's argument has always been, not that Arithmetic should be scrapped, or treated indifferently, but that our notions of what should be taught should be revised and brought into line with the needs of the time and the capacities of little children. Too much reliance has, in the past, been placed on " class " averages ; but when, as in the Dalton Plan, one has to deal with individuals and attempt " to produce the goods " from *every* child, the problem becomes a pressing one. What the writer urges is that, apart from investing the subject with some reality, there should be an " irreducible minimum " which all children might be expected to attempt, but that, for children of a

mathematical mind, special provision in the way of advanced assignments might be given.

Of the other subjects in the curriculum which come under the Dalton Plan, English (including Literature) still shows the greatest advance in the school, both as regards quantity and quality. There is no need to go over again the ground covered in the former volume. In discussing the subject then, the writer reproduced a number of poems written by children of from twelve to fourteen years of age. They varied in quality ; but the purpose of printing them was not in order to emphasise their intrinsic worth, though some of them displayed real merit, but because they were excellent illustrations of " creative " work, and, like the Drawing at present practised in the school, illustrated clearly what individual work should be. They are only referred to here in order to give the following poems, which, are in form, as well as imagination, delightful specimens. The first poem was the outcome of a study of Allan Cunningham's *Sea Song*. The boy had spent a holiday with his father sailing the Norfolk Broads, and the model studied evidently proved a very fit form for the expression of the writer's emotions. The time allowed for this in the assignments is three hours, but the poem was actually completed in twenty minutes. It shows clearly the effect of the work in the Literature room.

THE SAILOR'S PARADISE

" A bright day and a Springtime wind
A day that made one fit
My youth and health together, lads,
Appreciated it.

Appreciated it, my boys,
 In the real healthful way,
 For I went a-sailing, boys,
 On that bright Spring day.

“ A gallant boat, and a fresh sea-wind,
 And a deep green sea,
 A strong companion's ready help
 And I will happy be.
 For I'm a sailor now, my boys,
 A real old ' tarry Jack,'
 And give him ten years on the sea
 Then call your sailor back.

“ An old tar with a ghostly yarn
 In the dim of the lanthorn's light,
 A full moon on our silver stern
 In the calm of a young Spring night
 And the swish-swish of the southern sea
 And the slap-slap of sails,
 And the moon smiling peacefully
 Upon us telling tales.”

CYRIL BROWN (13 years).

THE PIPES OF PAN

“ I walked among the shady trees
 Beside the margin of a bay,
 And then I heard a music sweet
 Which came from far away.
 It seemed to set my soul at ease
 That song upon the morning breeze.

“ It came from yonder ancient oaks
 That tune that was so blithe and gay,
 I've never felt so care-free since
 That dewy morn in May.
 It floated o'er the woods and meads
 Upon the wind like thistle seeds.

“ And there, beneath a rugged oak,
Sat Pan with his wild pipes of reed,
And ere he sounded one shrill note
The lambs tripped o'er the mead.
And round and round they danced with glee
And seemed to share the joy with me.”
REG. TAYLOR (13 years).

The following, however, is a complete contrast. It is not inspired by the Literature room except in the sense that the boy probably disliked some of his work there. The topical song on which it is modelled is by no means classical.

WE AIN'T GONNA WORK NO MO'

“ The Dalton Plan is rotten,
For the kids at West Green School,
Before you've been in it hardly a month
You begin to feel a fool.

Oh! we ain't gonna work no mo', no mo'
We ain't gonna work no mo'
For Rusty, Lynchy, Moorey, Sharp,
We ain't gonna work no mo'.”

It is, perhaps, a good thing to have the naked truth from at least one boy, although any experienced teacher could write the biography of this boy from this verse alone.

Quite a fair amount of dramatic work is done. One of the most recent productions in the Literature room is a dramatisation of Ruskin's *King of the Golden River*. The actual play is too long to give here, but it is one that always gives pleasure to the boys who perform it enthusiastically, because, no

doubt, of the knowledge that it was written by their own companions. Another dramatisation is that of Macaulay's *Horatius*.

The writer is often asked if he uses the Dalton Plan for Scripture. His reply is always, "Not at present." There is no reason in the world, however, why this subject should not be treated from the standpoint of the Plan. The writer's difficulty has not so much been the Daltonising of the subject, as the fact that the Scripture syllabus for each class in his school, to which he is expected to conform (it was drawn up more than thirty years ago), is so unsuitable, in many ways, to the present needs of the children, and of the present age, that it is hardly worth spending the time necessary in attempting to put the bulk of it into the form of assignments at all. It has always seemed better, under the circumstances, to treat the syllabus from the class-teaching standpoint, and get the best out of it. He feels that the subject demands something more modern and vital in place of the present syllabus. The Cambridge Concordat * would appear to offer a suitable substitute.

For some time past, the Cambridgeshire Education Committee has been engaged in a scheme for grouping the schools in its county area into a system of senior schools, at which provision is made for the advanced instruction of children over the age of eleven years, and of tributary junior schools for children under the age of eleven years. There is an almost unanimous opinion that re-

* See *The Cambridgeshire Syllabus of Religious Teaching for Schools* (issued by the Cambridgeshire Education Committee—Cambridge Press).

organisation on these lines is essential to increased efficiency in elementary education, especially in rural districts. But the powers possessed by the authority only enable them to group schools in localities where all the schools are of one type, *i.e.* all council, or all voluntary. The Education Committee, from the inception of its grouping scheme, had acted in close co-operation with managers of voluntary schools, and, in order to facilitate the transfer of children from one type of school to another, or, better still, to secure a uniform system in the area by the transfer of voluntary schools to the authority, it decided to take in hand the problem of providing an adequate and efficient system of religious instruction for its area. Committees were appointed in March, 1923,* one of which dealt with Religious Instruction, and its avowed object was to try to find an agreed syllabus of instruction and observance, which would be acceptable to all religious bodies and would form an integral part of the educational system of all schools. The committee met with success, and the Concordat is the syllabus referred to. The present writer offers no opinion as to the suitability or otherwise of the contents of the syllabus which the Concordat produced, but he does regard the work done by eminent men in producing an agreed syllabus on modern lines as the kind of work that should be done in connection with this subject.

Apart from questions of creed, the Bible contains a delightful literature of which no child should be ignorant—the old stories, the old psalms, written in masterly language, are a mine of wealth from

* See also Preface to *The Children's Bible*.

which it ought to be possible to extract some first-rate material for assignments.* Moreover, there is no subject in the school curriculum which provides greater opportunities for what the Dalton Plan claims to develop, viz. independent thinking, initiative, and industry.

Some work in this direction has already been done by Miss Hetty Lee, M.A., of the National Society, and any one interested in the subject can read for himself in the National Society's Tracts on Religious Teaching, No. 18, what Miss Lee herself says.

She claims that teaching in religious instruction must follow the lines on which teaching is given in other departments of educational work. In harmony with the many forward movements in the educational world of to-day religious instruction must become more individualised.

By following closely the salient features of the Dalton Plan, but working them entirely in a class or room, Miss Lee has evolved a set of assignments of which the following is a specimen :

O. 2.

SELF-TEACHING.

RELIGIOUS INSTRUCTION.†

Date begun.....*Date ended*.....*Subject* : THE BOOK OF AMOS (Elementary).*Text Book for general reference*—"The Making of the Bible."*Scholar's Name*.....

1. Ask your teacher any question you wish ; also for pictures, maps, books, etc.

* See The Teaching of English in England (Report of Departmental Committee).

† To be obtained from the National Society's Depository, 19, Great Peter Street, S.W.1.

2. Put your initials in left-hand margin as you finish each piece of work. Show each piece of work, when you have done it, to your teacher, who will then initial in right-hand margin.

Scholar's Initials.		Teacher's Initials.
.....	1. Find the book of <i>Amos</i> ; copy verse 1 and draw a map to show all places mentioned in it . . . . .	.....
.....	2. What was the book of <i>Amos</i> like when it was first written ? Study a picture of a Hebrew scroll and sketch it . . . . .	.....
.....	3. What can you find out about the daily life of <i>Amos</i> ? (See <i>Amos</i> i. 1 and vii. 14) . . . . .	.....
.....	4. What memorable sights and sounds did <i>Amos</i> see and hear in his lonely life ? Of what did these sights and sounds remind him ? (See <i>Amos</i> iv. 13 and v. 8 and 24 before writing your answer) . . . . .	.....
.....	5. Study pictures of the hills round <i>Amos</i> ' birthplace and of Hebrew shepherds at their work ; then describe an imaginary day in the life of <i>Amos</i> . . . . .	.....
.....	6. Draw a map to show (i) the village of Tekoa, (ii) the town of Jerusalem where <i>Amos</i> would go to sell his wool, (iii) the high road from Judah into Israel on which he used to travel, (iv) the Israelite towns of Samaria and Jezreel which he visited . . . . .	.....
.....	7. Study a picture of the town of Samaria ; here <i>Amos</i> saw poor people living in crowded streets and rich nobles in splendid palaces. (See <i>Amos</i> iii. 9) . . . . .	.....
.....	8. What were these palaces like ? (See <i>Amos</i> iii. 15 ; v. 11 ; and vi. 1, 4-6) . . . . .	.....
.....	9. What evil deeds did <i>Amos</i> see the nobles doing ? (See <i>Amos</i> iii. 9 and 10 ; v. 7, 10, 11, and 12) . . . . .	.....
.....	10. Every year the nobles of Israel would meet for feasting and worship at Bethel or Gilgal. Put these places in your map . . . . .	.....
.....	11. What did <i>Amos</i> see the nobles doing even while they were worshipping God at Bethel and Gilgal ? (See <i>Amos</i> iv. 4 and 5) . . . . .	.....

Scholar's Initials.		Teacher's Initials.
.....	12. The nobles of Israel thought all was well with them because they worshipped God although they were cruel and unjust to men. What did Amos think was going to happen to them all? (See Amos v. 16, 17, and 27)	.....
.....	13. Tell in your own words the story of how Amos left his sheep and began to be a prophet and preacher. (See Amos vii. 14 and 15)	.....
.....	14. Amos journeyed through the kingdom of Israel preaching his message. What did he most often say? (See Amos v.)	.....
.....	15. At last Amos came to the great gathering of nobles at the town of Bethel. Draw a map to show his journey from Tekoa	.....
.....	16. What message did Amos give at Bethel? (See Amos vii. 11)	.....
.....	17. Who was priest at Bethel and what did he do? (See Amos vii. 10 and 11)	.....
.....	18. Read what happened at Bethel from Amos vii. 12-17; write this as a scene in a play	.....
.....	19. It was thought that Amos was driven back by the nobles to his own village and there wrote his book before he died. Why do you think he wrote it?	.....
.....	20. Copy and learn by heart the verses you like best in the book of Amos	.....
.....	21. If Amos came to our country to-day, what do you think he would say about our people and our towns?	.....

She claims that they have been successfully used and with good results. In the writer's opinion, the work asked for in these assignments would have a greater educational value if it could be co-ordinated with that of some of the other subjects of the curriculum, and the children allowed to work at the subject as they do at all other

subjects in a full Dalton experiment in the time of their own choosing. This, however, is not possible in most elementary schools where Religious Instruction has to be taken during the first period of the morning. The fact that it *has* to be taken at that particular time diminishes the full value of the self-teaching method in connection with the subject.

The writer himself makes a clear distinction between the teaching of Scripture and what is called the teaching of Religion. The teaching of Scripture, based as it is in this country, on the English Bible, is a comparatively unexplored ground so far as the Dalton Plan is concerned, but the possibilities are very great. The extent, to which the Bible is at present treated with indifference is deplorable. In most homes, if they possess a copy at all, the Bible has become an article of furniture, or perhaps a family register of births and deaths, and is relegated to a little table near the front window of the house, and neatly covered with an antimacassar on which stands a vase. The book is rarely read. The history, the literature, the great world stories, are surely a national possession, and are the birthright of every child. What flows out of these in the matter of belief are personal things, and belong to a period of life much later than the period of elementary school age. To pursue the subject further than this is to trench on debatable ground. The teaching of Religion, in the writer's opinion, is in a different category. It is not a matter of assignments—and cannot be. It cannot be taught by direct means. When asked what time he devoted to religious instruction a teacher once replied, "Five and a half hours a

day." This is what it should be. Religion must suffuse the atmosphere of a school so that, in a real sense, religion is practised and illustrated throughout the day. Dr. L. P. Jacks, in a notable passage, in one of his addresses sums up the matter in this way :

"Not long ago I met one of your great schoolmasters. 'Where is your time table—do you teach religion?' 'We teach it in Arithmetic by accuracy; we teach it in Language by learning to say what we mean—yea, yea, nay, nay. We teach it in Astronomy by reverence; we teach it in the playground by fair play. We teach it by kindness to animals, by courtesy to servants, by good manners to one another, and by truthfulness in all things. We teach it by showing the children that we, their elders, are their friends and not their enemies.'"

The writer hopes to see the time arrive when an agreed syllabus for Scripture study in schools may be possible, and the subject treated in a Dalton school in the ordinary way, and as seriously as other subjects are treated. It will be a notable development in the child's education, and it will be a service to him as well as to the subject itself. Meantime, Miss Lee's pamphlet and specimen assignments may well be commended to the careful consideration of those teachers, not only in the day, but also in the Sunday schools, who have to teach Scripture.

CHAPTER VI

A NOTE ON THE DULL CHILD *

A WRITER in a leading London news sheet, referring to a meeting of the Conference of Educational Associations held at the University College, London, in the early days of 1924, where discussion had taken place on the Sub-Dalton Plan, said that one of the speakers mentioned that "there is no such thing as an absolutely dull child."

"Perhaps not," commented the writer, "but business men will tell any school teacher, who cares to inquire, that there are any number of young people possessed of yawning cavities where the bumps of Orthography, Calligraphy, and Arithmetic should be found. The wide prevalence of such deficiencies may be because too much time is spent in filling other cavities with unnecessary information relating to a variety of fancy subjects; but whatever may be the explanation employers complain bitterly that they have never experienced greater difficulty in obtaining office boys, clerks, and stenographers with an adequate working knowledge of the old-fashioned three R's. All of which suggests that the trouble with our education is that it attempts to turn out supermen, and merely produces sub-boys." †

* The substance of this chapter appeared in the *School Guardian*, May, 1924.

† *Daily Sketch*, January 4, 1924.

All this sounds clever; it helps one to understand in what, in the opinion of the writer, education should consist. There should, at any rate, he thinks, be a working knowledge of the old-fashioned three R's (whatever that means!). Apparently, they should include Orthography, Calligraphy, and Arithmetic, and, perhaps, Stenography. It will be observed that Orthography is to take the place of "reading," and Calligraphy of "writing." There is to be no attempt to cultivate the ability to express oneself on paper—it is to be merely Handwriting. Well, these are good so far as they go, but they do not take us very far. Whilst it is not at all true that our education attempts to turn out supermen as opposed to sub-boys, it does attempt to foster intelligence, control, and responsibility. But apart from this, while some boys may fail in Orthography, or Calligraphy, or Arithmetic, or all these, there are yet some things they can do, and do well, which makes it difficult to believe that these boys are completely dull.

Some little time ago the writer met, on a tram-car, a man who would insist on talking about his brother. The favourite expression about his brother was that he had "clicked." By putting a few judicious questions, the writer found that the brother who was the subject of the conversation had just added to his business equipment a new motor lorry. "He's a marvel is that chap; no flies on him anywhere; but he left school in Standard IV." The writer became deeply interested in the story because it was so human. The companion proceeded: "When he was at school Mr. Croakem sent him to the school doctor to ask if

he *couldn't* learn or *wouldn't* learn." What the verdict of the doctor was did not transpire, but the writer was impressed by the fact that he and his companion were discussing the career of a young man who, in school, appeared to be a misfit, but who, a few years later, was successful in business. There is little doubt there were stored up in that young man reserves of initiative and resource, undiscovered in his school days, that now stand him in good stead.

How far, the writer wonders, is that case typical of hundreds of others in the elementary schools of to-day? Is it possible that, under any other method of school organisation, those reserves might have discovered themselves long before?

The whole question of so-called dull children has been forced on the attention of the writer during his experience of the last three years' working of the Dalton Plan by the Plan itself. It has been one of the valuable results of that experiment.

Whatever method of organising a school be employed, it is safe to say that all teachers are familiar with these three outstanding types of children—the so-called dull child, the slow child, and the shirker. Such other types as "bright" and "average" children need not detain us here, except to say that, under the old class system, as it was known fifteen or twenty years ago, the brighter and average children formed a very good shield behind which the dullards and shirkers were hidden away. The thing of greatest importance in those days was the "class average." "An average of three sums right out of four, and not more than two mistakes in dictation," was the

slogan. If the class average were to be raised at all, or even maintained, it was to the brighter children at the top of the class that one looked to raise it, and not to the "tail" of the class.

With the advent of newer methods of conducting schools the tendency, during recent years, has been to place less importance on the class average, as such, but to give greater attention to the individuals of the group. No method of school organisation, for many years, has done so much to place the emphasis on the individual, rather than on the class as a whole, as the Dalton Plan—one of the underlying principles of which, it will be recalled, is expressed by the phrase "*Individual work!*" Under the Plan, each child is supplied with an appropriate amount of work in all the subjects Daltonised, which may or may not be done in a given time. Let us assume, for a moment, that six subjects are treated in this way, and that those so treated are English, Arithmetic, Geography, History, Drawing, and Science, and also that the time given for the completion of the work in each subject is a month. Then, under the Dalton Plan, the children are allowed to tackle these subjects in their own way, choosing, for themselves, to do first those they feel they can do best and quickest, but making the attempt to get them all done in the time set.

As soon as the Plan is thus allowed to operate one thing results immediately—the brighter children will go ahead, the average children will go plodding along—but there will always be a residue which, for various reasons, cannot get into its stride. At once, therefore, there will be a wide divergence of

the time it takes different children to get through their work. Brighter children may, and do, complete the work in less than a month, as the head teacher's record previously given shows; average children will take the full month; but others will be slow, or, maybe, shirk; while some, for reasons which, when their cases are properly diagnosed, seem real and cogent reasons, will be unable to make progress at all.

The slow child should cause no anxiety to the experienced teacher who knows his business. Children are not all cast in the same mould, and it may be well to remind ourselves that even adults do not all work at the same rate of speed. The shirker, however, is a different problem. He is seldom dull, nor, of necessity, is he slow—he just doesn't want to work. Very often he is the bright child, for the lazy bright child is not unknown. Fortunately, the number of these is small. The proportion of them is no larger than it is among adults. It would be unsafe, and indeed unwise, to attempt to lay down any hard-and-fast rule for dealing with them. Their disinclination to work at times makes them, in all probability, fitter subjects for the doctor than the teacher.

The child who really needs the wisest care, and the sympathetic consideration of the teacher, is the child who, for reasons that are not always manifest, cannot get going at all. He may be slow; frequently he is classed as dull and backward, and often given up in despair, when what he really requires is some inquiry into, and effective treatment of, his particular case.

The writer's experience of working the Dalton

Plan has shown him all these types at one time or another. The brighter boy who gets his work done quickly, the average boy who just meets the demand, the slow boy who takes, perhaps, six weeks, or two months, in which to do a month's work—all these have ceased to cause anxiety. Those who cause genuine concern are those for whom least has been done in the past, partly because of the conditions of the teacher's work (large classes and so on), and partly because their cases were difficult to understand. It is one of the consequences of the Dalton Plan that these cases are automatically "thrown up" and have to be dealt with.

What are the facts that one has encountered? Covering a certain period of seven weeks' working of the Plan it was found that 41 boys (out of 220) were behind with their first month's work. On close examination, the record cards of these boys showed that one boy was in arrears with Drawing, fifteen with Arithmetic *or* English, the remainder with Arithmetic *and* English. In each case all the other subjects had been satisfactorily completed and approved by the subject masters. In general, it was found that most boys could manage quite well four subjects out of the six, and, from the figures given above, it will be observed that the subjects giving most difficulty were Arithmetic and English. Is it quite fair, then, to describe boys, who can do at least four out of six subjects, as "dull"? Obviously, if they are dull at all, they are dull only in *some* subjects, for the others were comparatively well done. On the other hand, might it not be assumed, pending further investigation into the matter, that there might be a hundred

and one reasons for the apparent backwardness? For example, do we give sufficient consideration to the undoubted fact that many children are late in developing? Or, if they have developed, in which subject did they develop most? Was it Number? These are important points that must be considered with much greater care than has been given to them in the past. This, in all probability, is the explanation of the case of the brother of the companion on the tramcar. Consider also, in this connection, the case for Handwork. It was the realisation of this truth that led Sanderson of Oundle to say:

“We must not cast out the weak ones—we must find out what kind of work will appeal to each of them. It is our duty so to organise schools that every boy—weak or strong—shall be able to make full use of his faculties.”*

He adds, with emphasis, that “strictly speaking, the dull boy does not exist.”

Having worked the Dalton Plan now for some considerable time, and having been faced many times with the difficulty of the so-called dull child, the writer tried to devise some means which would permit of getting into closer touch with this particular type, and thus help in trying to understand him. It is often said that the principles underlying the Dalton Plan are excellent for the bright boy—he gets his chance. But they are excellent also for the child who is plagued with difficulties, whose case needs to be carefully analysed. The Dalton Plan straight away helps the wise teacher to discover which are the boys so wrongly described as dull: he then sets out to discover the treatment.

* See *Sanderson of Oundle*, p. 325.

In the writer's school, largely in order to meet this difficulty, the "Adjustment Room" was instituted. This room has been already fully described.* It was not primarily a room for duffers, nor were boys kept in that room permanently. Those subjects which boys were quite able to accomplish they worked under normal school conditions—in the subject rooms, and with their fellows. It was only those subjects which gave special trouble, *e.g.* Arithmetic in some cases, that were worked in the Adjustment Room, which was, in effect, a room where any subject could be worked that presented particular difficulty to the child. It is surprising, in actual practice, what are the obstacles that sometimes prevent a child's advance, which, if properly treated, vanish. Indeed, it is often astonishing what trivialities some of these obstacles turn out to be, although, at the time, they are very real to the child. To visit that room was never allowed to be regarded as a degradation. Boys were frankly told that apart from the great help they could ordinarily obtain from their subject teacher, a visit to this room whether for a long or a short period, would ensure them even greater help in their peculiar difficulties than they could expect to obtain in any other way. The room was in reality a mental hospital, where "cures" might at least be attempted, and were frequently effected. The writer has seen some remarkable cures of boys who have had their difficulties cleared up and who have rejoined their fellows, working with that fresh hope and joy that come with a sense of conquest. It

* *Individual Work and the Dalton Plan.*

may also be said, with truth, that such treatment has produced more work from every boy so treated. It may interest readers to know that the number of boys who visited the Adjustment Room was usually somewhere between fifteen and eighteen per cent. of the whole of the boys working under the Plan.

For reasons which have already been given (p. 85) this Adjustment Room has had to be closed for a time. It seemed unwarrantable, however, to deprive the "dull" boy of the help he so obviously required. After careful thought, the method previously described in connection with Arithmetic was adopted, and while it does not do all, nor in the same way, the work that the Adjustment Room did, it is a temporary substitute and does not rob the child of the assistance he needs in that subject.

The problem of the dull child is by no means an easy one. It cannot, in the writer's opinion, be properly solved by the simple expedient of putting such children together in a room and keeping them there for all subjects. In the nature of the case, as the writer has tried to show, they are not dull in everything, and need therefore a very varied treatment. The problem of the backward child has not yet been fully understood. The making of intelligence and mental tests, either for groups or for individuals, is testimony that we are only at the beginning of the problem. Having established intelligence quotients, we have then to learn what is the proper treatment of the individual and, further, how to make provision for that treatment. It is pretty certain that the treatment will have to be on individual and not on "mass" lines.

It is because the Dalton Plan assists in discovering the backward ones, together with the subjects in which they are backward, that support is claimed for the Plan in the interests of the so-called dull child. On viewing the working of the Plan over an extended period, the writer is more and more convinced that not only does the bright boy get his chance, but the so-called "dull" child turns out to be very often not a dull child at all, but one who on some sides of his mental make-up simply requires greater human and sympathetic treatment.

CHAPTER VII

THE TEAM SPIRIT IN THE DALTON PLAN

It is claimed for the Dalton Plan that its greatest advantage is the great social change it brings about in the schools which adopt it. To those who are familiar with Dalton organisation, a comparison of it with the old method of segregation into classes, for all purposes and for the whole of the day, the change will be apparent, if not striking. Classes as they were organised under the old system, and, to be quite frank, are still, to some extent, even in some classes of a Dalton school, have little social value. Whatever social value such classes might have presented, was often negated by the facts that, apart from meeting only the same pupils day after day, each member of the class was allotted the same place in the room, and the group was kept together frequently for a year at a time, only, at the end of that period, to change *en masse* into another room, because its standard had been changed. There were few opportunities in class-work, under this arrangement, for that interaction of social groups which Miss Parkhurst is always at great pains to stress—and rightly so, for this interaction constitutes the principle, more than any

other, that characterises the Dalton Plan, and distinguishes it from any other plan of organisation which may—and many other plans do—offer a large amount of freedom to the individual child.

“Education always needs a society,” says Dr. Ernest Barker, “because it is a social process.”* And if the school is, indeed, to be, in any sense, a reflex of the greater world outside, where action and interaction operate, among the large numbers of people who jostle each other all day long, and who come and go at frequent intervals throughout the day, it would appear that the fullest illustration of the interaction of social groups would occur less in the smaller and almost static groups, or classes, whose personnel, and even class position, remain the same for a year, or for more than a year, than in that larger group in any school comprising the total number of those in the school capable of working under Dalton conditions, where freedom of movement from room to room provides that grouping and regrouping of pupils from hour to hour, and day to day, which is an essential feature of the Dalton Plan.

Dr. Montessori has reminded us that social life does not consist of sitting in rows—or, in flocks being shepherded by one person.† It is based primarily upon the sentiments and virtues of man. One of the possible criticisms of the Plan is that it is too individual—that it is liable to assist in creating a race of highbrows who will act in complete isolation. Dr. Montessori, if we may refer to her once more,

* Address to Conference of New Ideals in Education, Oxford, Easter, 1923.

† See *Times Educational Supplement*, July 21, 1923.

contends that the idea that individual work is anti-social is rooted in prejudice.

“We ought rather,” she says, “to ask: Do the virtues develop under these conditions or not? Has the child occasion to exercise them? Who can imagine a perfect society, except on the basis of people perfecting themselves? An orchestra is not created by the conductor; nor does the fact that each person practises alone render him incapable of taking part in the ensemble. Collective harmony is impossible without individual harmony.”

There is a very real sense, therefore, in which the provision of opportunities for the expression of the highest individuality helps to produce the most perfect social group.

The desire in elementary and secondary schools, even under old methods of organisation, to secure some sort of interaction of groups, is well exemplified, in one direction, by the great development in the cultivation of Sport in schools, and, in another direction, by the establishment of school “Houses” on the lines of those to be found in the great Public Schools.

It has been aptly said that the common interest in Sport includes every class and age in its freemasonry. In the sphere of games, social interaction is not only established, but reaches a very high level. It is so organised that every boy (or girl) contributes, according to his or her skill, to the sporting rank attained by the school as a whole. The hierarchy of cricket and football teams, of different elevens, are animated by a community spirit in its most highly developed form. But

that community spirit, unfortunately, is limited by the boundaries of the cricket and football field. It often dies at the threshold of the classroom, though it is only fair to say that its effects are never entirely lost. But the group devotion to the game, the united desire to excel in it for the sake of the sporting reputation of the school among other schools, has under old methods of organisation and classification no counterpart on the intellectual side.

Attempts have been made in many schools to supply this counterpart by the institution of the "House" system. In this way, it may be, four or five, or even six, groups of pupils are formed from the whole existing population of the school, and named as the fancy may dictate. The same devotion to their House is often manifested on the part of the pupils as is seen in the members of the football or cricket team to the team itself. This arrangement of Houses is one of the chief characteristics of Dr. O'Brien Harris's experiment, for she combines the House system with the Dalton Plan as generally understood. Miss Parkhurst herself has made provision, in her outline of the Plan, for such an arrangement by suggesting the use of "House" graphs. It is feared, however, that in ordinary elementary schools, the attempt to apply the House system to the purely intellectual work does not entirely succeed. Apart from its partial failure on the intellectual side, it often leads to severe competition and to dominance of an unhealthy kind. In the realm of Sport, however—especially in general school sport as distinct from school games—it may become a most useful adjunct to the school.

The rivalry of Houses, on a sports' day, provides just the spice to put life into the occasion. And the writer knows of many schools where the institution of school Houses for the purposes of Sport makes it easily possible, among other things, to abandon the pernicious system of giving prizes and trophies to competitors, and to substitute a system of points for Houses. Group devotion and the team spirit are thus the things most encouraged.

The late Mr. Sanderson of Oundle thought that one of the worst features of our Public Schools was that they were organised with a view to dominate rather than to serve.* He also thought our elementary schools, in this respect, were modelled on the Public Schools. Those who are familiar with the *Life* of Sanderson will recall his contention that it was not the function of a properly conceived school to turn out leaders of men estranged from the great mass of their fellows by an exquisite aristocratic culture, but rather to instil a sense of social service, not so much by having actual teaching, as by engaging every talent, where it could possibly be used, in a widely extended, and largely practical, curriculum; so that the school itself became a miniature society where the pupils could realise some of the great lessons life has to teach. In other words, he insisted on the team spirit, and the story of his great experiment at Oundle makes one of the most interesting records in this respect in the annals of educational practice. Always, with Sanderson the motive must be service.

A short time ago, a friend of the writer's, who

* See article in *Teacher's World* (March 19, 1924) on *Towards better Education* by the Rt. Hon. H. A. L. Fisher, M.P.

happens to be the Head of an Evening Continuation School, found himself on one occasion short of staff, and with two classes on his hands. Being pressed with other work, he suggested to the pupils that they should spend their time in writing an essay on "My recollections of day school." These essays came into the hands of the present writer. He does not suggest that any safe generalisation can, or should, be made from them, but he does wonder how far the sentiments expressed are general or symptomatic. The following is an extract from one of these essays by a lad of sixteen who, curiously enough, had had the advantage of a schooling beyond that of the elementary stage :

"In the first few weeks after leaving school I seemed to breathe more freely. . . . Every Monday morning I crawled reluctantly to school with the week-end's homework packed untidily in my satchel which was slung perilously over my shoulder. I hated Arithmetic and the Mathematics master like poison, and always tried to look ill so that I would be able to take a rest during the lesson in the playground. Presently, however, the master 'rumbled' me and life was unbearable after that.

"History and English were both possible, but the master of the latter was hardly my favourite. Regularly I received the following order half-way through the lesson: "Walk out—Right outside the door! Go on! Get out." This order was given by a small, insignificant looking teacher and was punctuated with a prod in the ribs or a box round the ears which made me fell mad. . .

"On the whole, I thought school was a horrible nightmare from which I should never awake. I thought it to be a direct descendant of the infamous Spanish Inquisition only it seemed to have got worse in descend-

ing. Time after time, we boys joined forces to bring about the downfall of all schools, so that we and our followers-on should never be bound to these terrible things which were tyrants' abodes but which were hidden under the hated name of schools. We should be gloriously free. . . ."

There is, doubtless, a good deal of romance in this, due, perhaps, to a strain of adventure in the make-up of the writer. But when full allowance is made for this, it would seem a pity that anything like this should, in any sense, represent the memory cherished by any boy of his first school. The present writer has no knowledge of the lad's after-school career, but some idea of his present situation, or it may be want of one, may be gauged from the conclusion of his essay—"I would bear all the tyrannies and trials just to have the happy thought 'I am back at last at school.'"

Here is an extract from another essay of a lad of fifteen; it emphasises that aspect of school life which fosters the team spirit—though it is quite evident the team spirit did not suffuse the entire work of the school:

“. . . One lesson I hated, however, was Arithmetic. From the time I began school till I left I was a complete and hopeless ass at it. Consequently, it is not difficult to find a reason for my dislike (of school). Geography, History, and Art proved a welcome diversion, but Swimming was a glorious lesson, and every one enjoyed it immensely. I was not very great at games, and although I played football and cricket for my House and Netball for the school, I was quite a moderate player. I was greatly surprised when I was elected House-Captain, but managed to keep my end up till I left

school, and it was very encouraging to be able to bag the shield for the second year in succession."

The next, and the last, is from a girl of fourteen and a half :

"Every morning at a certain time we had Drill for about a quarter of an hour ; every Friday we had a game of Netball or Captain-ball. At our school we had Companies. I was in 'Green.' Every June we had our sports, and for three times running our Company came on top, so we had the shield for three years. One great event I longed for was the swimming gala which occurred once a year, and where all four Companies competed. Unluckily our Company never won it. It nearly always went to 'Blue.' Several of the teachers were ever so nice but one or two were just the opposite. . . ."

A careful study of these essays (there were about thirty of them, all more or less similar), with such internal evidence as they offer, and making full allowance for the frank and irresponsible immaturity of youth, leaves one with a good deal of food for thought. They are given mainly to illustrate one point, namely, the enthusiasm they disclose on the part of the pupils when opportunities came their way for displaying devotion to the group—whether in a team, or house, or company. They illustrate other things too, and none more forcibly than the necessity for a change in school atmosphere and organisation. The remarks on Arithmetic are interesting also, and, in some sense, dot the *i*'s and cross the *t*'s of some of the sentences of the previous pages. All the same, the spirit of the team was evidently a real thing.

Just as some critics have remarked that the

Dalton Plan is too individual, so there are others who remark on what they describe as the absence of the team spirit. It is quite evident, however, that so far as Sport is concerned that neither in the Dalton school, nor in any other, is it difficult or impossible for that spirit to be displayed. The whole point is whether in the purely intellectual work the same thing can be seen as is manifested in Sport. It is difficult to arrange teams for competition in Arithmetic, or History, or any other subject. But even if that were possible—and its efficacy is doubtful—it is surely not the team, as a team, that matters, but the team spirit. The failure, therefore, to observe the team spirit in the Dalton organisation is doubtless due to placing the emphasis on the team rather than on the spirit of the team. Teams, in the sense of football or cricket teams, struggling for their school, assuredly are absent, but of the spirit of the team there is abundant evidence, and it is manifested in the sentiments and virtues, referred to by Dr. Montessori,* which the conditions created by the Dalton organisation help so plainly to produce.

Is it not possible so to arrange the work of a school that these virtues may supervene; in short, that the team spirit may be manifested?

It is here that the organisation of the school on Dalton lines comes to our assistance. What in effect happens, is that that part of the school so organised becomes, in fact, a community with certain distinctive characteristics. These have already been pointed out, and consist mainly of freedom and interest. It has been said, with great

* See pp. 122-3.

truth, that the atmosphere of a school is more important than formal instruction. In any case, the Dalton Plan engenders a new spirit—the community spirit—and it is a spirit closely analogous to the team spirit, the sure signs of which are loyalty, honour, fair play (playing the game), co-operation, fellowship, and service. In short, the team spirit itself.

It is the fact that a community exists, and that the community spirit—with the sentiments and virtues outlined above—is so fostered as to make it difficult to believe that any one who has actually seen a Dalton school in being could bring himself to say that the Dalton Plan implies a lack of that spirit or of real social environment. The truth is, it increases them. The constant change that takes place from hour to hour in all the subject rooms sets up new contacts within the community, and there are constant action and interaction among the numberless groups into which the community life throws the pupils. These groups may be large, where the bond is the Form itself; or they may be small, where the bond is friendship, or a common difficulty, or a common interest. But it is not the size of the group (or team, if you will), or even the group itself that counts. It is the motives that govern the contacts and the conduct of the groups. It is an everyday experience under Dalton conditions to find friend working with friend, older boys helping younger boys, brothers endeavouring to put each other on the right track. One of the most interesting experiences is to observe the exhibitions of real fellowship and service whenever a fresh group of younger pupils comes into the Plan. During the

three years and more over which the experiment has stretched the same thing has happened—as has already been pointed out—the older and more experienced of the community lay themselves out to lend a hand to those who are immature and inexperienced, and who come to Dalton work for the first time. This surely is the team spirit in its highest manifestation, and cannot, as, indeed, it does not, fail to make a lasting impression on the minds of those who see it, those who are helped, and those who give the help. It is this kind of thing that makes the Dalton organisation so valuable, and marks off that organisation from any other with distinct clearness. The community is active not passive, work is respected, and those virtues and sentiments of which Dr. Montessori speaks, for which the team spirit stands, are cultivated and developed in a new social medium that prepares for life and citizenship.

CHAPTER VIII

THE WIDE ACCEPTANCE OF THE PRINCIPLES OF THE PLAN

IN the matter of the Dalton Plan, the theorists are far ahead of the practitioners. This is one of the remarkable features about it. Usually in England the process is reversed, for it is the practitioners who do things, and, if successful, set about finding the theory that fits and justifies the practice. The principles of the Dalton Plan have attracted very many who do not as yet feel themselves competent or courageous enough to apply them. The rate at which discussion of the Dalton idea has spread can only be described as truly remarkable. It is quite true that Miss Parkhurst first conceived her ideas of the laboratory plan as long ago as 1911, but it is also true that the first full-dress experiment took place in the Dalton High School, Massachusetts, in 1920. That the Plan should have found its way around the world in the short space of five years is a noteworthy event, and fully justifies the remark of Sir Michael Sadler* that when the time comes for retrospect, and for summing up the movements of opinion in English education during the last few years, the historian will dwell upon the

* See pp. 15, 16.

significance of Miss Parkhurst's influence and of the Dalton Plan.

It is a fact, however, that, though it may be true that educational opinion is in advance of educational practice in this matter, the number and scope of the experiments on the Dalton Plan already being tried, as well as their geographical distribution, is very wide. This widespread acceptance of the principles underlying the Plan is worth considering at greater length.

Though the machinery of organisation connected with the idea took its rise in America, the greatest early advance in practice was made in England. Mr. Eades of Leeds had been working on lines very similar to those outlined by Miss Parkhurst even before Miss Parkhurst's book was written, but one of the first schools in this country to experiment with the Plan,* along Miss Parkhurst's lines, was the Streatham County Secondary School for Girls, where the experiment met with signal success; and though modifications have been made from time to time—these are inevitable wherever, and by whomsoever, the Plan is tried—it is still carried on and has, the writer believes, also successfully emerged from the inquisition of the Inspectors of the Board of Education. This is not to say that the Board expressed official approval or disapproval of the Plan, but it is, perhaps, not unfair to infer from the fact that the Plan still survives, that the school has not suffered in educational achievement because of the Plan. Critics might reply that the school succeeds in spite of the Plan—those who know

* See *Education on the Dalton Plan*, Helen Parkhurst, p. 144.

what the Plan stands for, believe the school succeeds in a very large measure because of the Plan.

Dr. O'Brien Harris began her experiment at the County Secondary School for Girls (The Howard School), Clapton, London, in 1920. Her particular contributions to the Dalton Plan are the retention of the vertical classification (the House System) and the introduction of individual time tables. Dr. Harris has so fully described her work, and the reasons for it, in her valuable book *Towards Freedom* that it is unnecessary to describe it here.

Soon afterwards, in 1921, an experiment was tried, and is still continued, at the West Green Boys' School, Tottenham (Elementary), and, a little later, at the Tiffen Boys' School, Kingston-on-Thames (Secondary). The work at the former school has been fully described* and the description is continued in some measure in the present volume. The results in the latter school may be gauged from the quotation from the report to the governors of the school given on pp. 51-2.

It is true to say that during 1920 and 1921, and onwards, hundreds of schools—Elementary, Secondary, Evening Continuation, Private Schools, and even Reformatories—in this country have applied one or all of the principles of the Plan with varying success. It is likely that the number of schools applying all the principles at the same time—implying the use of subject rooms, and so on—is much smaller than the number applying the principle of individual work alone. But the total number of schools using the Plan in some form or other must be very large. It is difficult

* *Individual Work and the Dalton Plan.*

to give exact figures, but they probably run into thousands.

One of the most hopeful signs that the idea is making headway is the interest taken in it by the Training Colleges both for men and women. In these colleges so little time is available during the two-years' course for a detailed study of the history or the foundations of educational method and practice that the unusual amount of interest displayed by them in the Plan is remarkable. The writer can speak from experience of the hundreds of students from the London and Home Counties' Colleges who have visited his school, and from the hundreds more he has addressed in the colleges farther afield, that there is a real and living interest being shown in the Plan which must, in the long run, have a very considerable effect on the educational practice of the future. The idea has received favourable consideration in Wales, especially in South Wales, and has made its way into Scotland and Ireland also.

From this country, the Dalton idea has spread out in every direction. The reader will gain some notion of the widespread interest being taken in the Plan if the writer recounts from his correspondence, from the Visitors' Book at his school, and from other sources, which of the countries of the world appear to share the enthusiasm.

In the British Dominions, the movement has been taken up with considerable interest due, in part, to the information gained and given as a result of the Triennial Imperial Education Conferences,*

* See *Report of the Triennial Conference on Imperial Education*, July, 1924, pp. 124 and ff.

and of the exchange of teachers now carried out on a fairly large scale between the Dominions and the Home Country. In Australia, experiments are being carried out in Victoria, Queensland, and South and West Australia. The best known experiment there, is that carried out by Mr. Frank Shann, M.A. Dip. Ed., Headmaster of Trinity Grammar School, Kew (Victoria), and described in detail by him in his booklet *The Dalton Plan in Australia*. Mr. Shann has a school of 260 boys, and it is curious how his experience, both as regards the inception of the work, and the difficulties to be encompassed, has coincided almost exactly with that of the present writer. The foreword to this booklet, contributed by Mr. George S. Browne, M.A., Dip. Ed., Vice-Principal of the Teachers' Training College and Senior Lecturer, School of Education, University of Melbourne, is so valuable as to be well worth quoting in full :

"It may be of interest," he says, "to set down the main reasons for the fact that the Dalton Plan is making such steady progress in the leading educational countries of the world. They are as follows :

- "1. The underlying principle is unassailable, viz., that in a group of forty boys, no two will have the same intellectual equipment, the same special likings and weaknesses, the same rates of work and methods of attack, the same types of imagination and the same powers of concentration. The class system puts the same task before all and demands a uniform achievement in a uniform time. The Dalton Plan caters for the special abilities of each individual, maps out for him his own

road, and tells him exactly what progress he is making.

- “ 2. The Plan which is capable of modification to suit almost any conditions does not commence by declaring that everything done previously in education has been wrong. Most good teachers have used some of its features at one time or another. It consolidates the advantages gained by previous methods, but carries them on to a much higher plane of efficiency.
- “ 3. One important cause of its success has been the fact that only a good school can carry it out. A school with weak discipline, indifferent staff, poor organisation would collapse in a month into hopeless confusion. The Plan demands strong discipline, enthusiasm on the part of the staff and pupils, a good school tone, and a flexible, smooth-working system of organisation. It means very hard work for the staff and the boys, but it brings its own reward in a changed attitude towards the work itself.
- “ 4. There is a great difference between Order and Discipline in a school. A Master may keep perfect order in a classroom but be useless as a real disciplinarian. His order is mere repression, but Discipline must be self-discipline to be of any value at all. The Dalton Plan interprets Discipline as Co-operation between all concerned to gain pleasant and effective conditions of work for every one.
- “ 5. It has been a favourite dictum amongst educationalists that the School should be a miniature community closely resembling the actual world that the boy will move in afterwards. But the resemblance has been very

remote except in outdoor activities. The dominant characteristic of the classroom has been passive reception of prepared and organised facts. The Dalton Plan makes the community idea much more attainable, for the classrooms become veritable hives of industry, where each boy is doing the best he can by himself, learning to investigate and organise material, and, at the same time, continually practising co-operation.

- “ 6. No system will entirely eliminate slackness or cure all educational evils. There will still be lazy boys, and boys lacking in determination. But, under the Dalton System, there will probably be less of these two classes, for there is a special incentive to work and be interested, and when the slacker sees the graphs of his comrades racing ahead of his, he not infrequently turns the situation over in his own mind, and tries to catch up.

“ There are now,” continues the Foreword, “ a large number of schools in Victoria experimenting with the Dalton Plan. Trinity Grammar School has tried the system for over twelve months and has achieved marked success in it. In consequence Mr. Shann’s account of the school’s experience and difficulties overcome, will be read by teachers and parents with a great deal of interest. The Australian boy is noted for his initiative and keenness—under a system like this there seems no limit to what he might achieve.”

Mr. Shann’s own conclusion is worth giving too :

“ . . . When one has been working for some time under the old system, the cramping disabilities of it become only too apparent. It does not take sufficiently into account the needs of the very diverse personalities to be found in any given set of boys : it does not allow

sufficiently for differences of ability and temperament : it depends too much on repression, and too little opportunity is given for the development of the individual. School life under the old plan, as Thring pointed out, is an eternal contest between masters and boys, and no weapon is unfair in the warfare. In actual fact, masters and boys are spending their days and their energies with the same great aim—to give to every boy his birthright, to grow, in so far as his circumstances and his spiritual energies will allow, into the stature of a perfect man.”

All of which is well said, and expresses in a forceful way, what some on this side of the globe have only said at times in lisplings. Referring to the present position of State Education in Australia, the Official Year Book of the Commonwealth of Australia for 1924 says :

“ There has been a wider employment of kindergarten and Montessori principles in the early stages, and the more or less purely abstract teaching of the older days has been largely replaced by concrete methods. Self-activity on the part of the pupils has been further cultivated by the partial adoption of the ‘ Dalton ’ system, or modifications thereof.”*

Very much the same story comes from New Zealand, where the Plan has been fully discussed in the official reports of the Education Department. The periodical publications of the Department bristle with excellent accounts of experiments with the Plan in all types of schools. In the October (1924) number of the *Leaflet*, issued by the

* *Official Year Book of the Commonwealth of Australia*, No. 17, 1924, p. 451.

Wanganui Education Board, there is published the report of an address given before the Canterbury Women Teachers' Association the previous June by Mr. F. C. A. Stuckey, the Senior Inspector of the district and Editor of the *Leaflet*. He reminds his audience in the early part of his address of "Section 5" of what is designated officially as "N.4," though it bears a longer name on its front cover, and is known to teachers generally as "The Syllabus."

"This section," he continues, "which is quite the most important part of that document, says: 'The Inspector's investigation shall be made on the broadest lines possible, and he should guard against estimating the efficiency of a school or a teacher solely in accordance with measurable results, irrespective both of the manner in which these results have been produced, and the effect the production of such results may have had on the mental and spiritual development of the pupil as evidenced by his intelligence, his spontaneity, his interest in his work, and his general alacrity. In every case more credit should be given to a teacher who relies with success on some system of auto-education than to one who relies on the more rigid drill methods of instruction. Every encouragement should be given to teachers to investigate and experiment with the newer methods of imparting instruction, and to modify their methods in accordance therewith.'"

Interested Daltonians will anticipate the sequel. It is given here in Mr. Stuckey's own words:

"Modifications of the Dalton Plan began to appear in several New Zealand schools, but I am not sure that any school has yet carried it out in full as a laboratory plan with specialist teachers. Of the development of

the Plan in the Wanganui district I can speak with full knowledge. Several notable experiments were carried on, none without quite conspicuous success. Each teacher modified the Plan to suit himself or herself, but all used the basic principle of assignments, and all were enthusiastic with regard to results. Some of these teachers contributed articles to the *Leaflet* in October, 1922. I do not like to differentiate, but one of the best applications of the Plan was in a class of Standard VI girls in a Grade 6 school. The amount of work done by the girls, and the interest taken in their work was astonishing. The teacher on arriving at school always found the girls at work, and she had to drive them home in the afternoon. I have seen them at work at little tables in the central hall with 500 other pupils going in or out, and so entirely absorbed in their work that they took absolutely no notice of any one. Either the work or the teacher had a most inspiring effect, for this class of 45 girls in one year raised funds which, with the subsidy, enabled them to spend £75 on their own class library. Other notable experiments were conducted in a Grade 3 country school, and in a Standard V class with a roll-number of nearly 90—25 of whom were selected for experiment by the teacher—not from the best ‘examination’ pupils, but including two retarded and several ‘slow’ pupils. Incidentally may I relate that the whole class of 90 co-operated in group work, engaging themselves in working up a history of their town from the earliest settlement, obtaining their information from original documents and similar sources. They turned out a most creditable piece of work. These are by no means the only cases of the application of the Plan in Wanganui district, but the work of these teachers and their pupils is on record. . . .”*

Tasmania is well abreast in its consideration and

* *Wanganui Education Board Leaflet*, No. 20, October, 1924, p. 255.

practice of the Plan ; some of the earliest visitors to the Home Country for purpose of observation of Dalton experiments were administrative officials from Tasmania.*

Of South Africa and Canada no such definite information is at present available, but there is good ground for stating that in both countries the Plan is being considered, and in a few schools, notably in Cape Town and Pretoria, actually carried out. Natal has also made careful inquiry into the matter, while so remote a place as Oyama in B. Columbia has, according to the *Vernon News*,† been busily discussing it. The University of California, published (Bulletin No. 211) an elaborate record of research work relating to the Plan.

India has shown a strong disposition to favour the Plan. Districts so wide apart as Bombay and Calcutta, Lahore and Madras, have established experiments with the Plan, while at Lucknow, the Kanyakubja Intermediate College, the director of which was Mr. S. N. Chaturvedi, M.A., is described on its notepaper as "The Dalton Laboratories"! The question is now being seriously discussed as to the possibility of introducing the Plan officially into all the schools of the Independent State of Hyderabad (Deccan). Articles on the Dalton Plan and the newer ideals in education, showing a real grasp of principles, have been contributed to *The Hindu* and *New India*, both of Madras. Reference has already been made to the experiments in schools in the

* See *Official Gazette of Education Department of Tasmania*, No. 11, November 15, 1925, p. 135.

† *The Vernon News*, Vernon, B.C., February 26, 1925.

Assam Valley. Burma, too, has been enthused, for articles have appeared in the magazine of the Bhymeah High School,* and in the leading Rangoon journal. Ceylon also has discussed the Plan, as articles in the *Ceylon Independent* show. Ceylon has its doubters, however, for an amusing story comes from a correspondent who discussed the Plan with the members of the Staff at one of the colleges there. The Principal, having supported certain criticisms of the old Plan made by this correspondent, was interrupted by one of the members of the Staff who rather decried the Dalton Plan. He said: "It was a woman who was the first mischief maker, and here we have listened to another woman trying to make mischief in matters educational!"

The recent tour round the world of Sir John Adams was undoubtedly responsible for a great deal of educational discussion in the towns he visited, and it is not therefore surprising to find well-informed articles on the Dalton Plan appearing in such papers as *The Cape Times*, *The Melbourne Argus*, *The Adelaide Register*, *The Cairns (Queensland) Post*, and *The New Zealand Herald*.

Districts so far flung as British Guiana and Borneo have also their experiments.

America seems now to be regarding the Plan with greater favour. It is not surprising, if only on the ground that a prophet is not without honour except in his own country, that American teachers did not turn to the idea with avidity. America, too, is a wide country, and practical reforms move slowly there. In typical American

* June, 1925.

phraseology the *Monitor* Bureau* informed us, on January 28, 1925, that "the first 21 of the 400 Elementary School high spots (presumably of New York) in the School Survey's Summary to W. J. O'Shea, superintendent, just made public, relate to the fact that 15 different schools are trying the Dalton, or contract plan, of individualising instruction in one or several, or all classes." Miss Parkhurst's own Children's University in New York is the model, as well as the Mecca, of hundreds of American and other teachers.

Dr. Lucy Wilson, Principal of the South Philadelphia High School, is applying individual methods to a large and overcrowded High School of 2000 pupils. Active research work is being carried on in universities so widely distributed as Columbia and California.† The latest development in America is the establishment of an International Dalton Information Bureau in New York which is to form a Clearing House for inquiries and information for all parts of the world.

Coming nearer home, and leaving for the moment those countries which in most things are associated with the old country, it is interesting to observe the inroads being made by the Plan in the European countries. Such unlikely soils as those of Roumania, Bulgaria, Latvia, and the Ukraine have had their impacts. Italy, Austria, and Germany have shown real interest in the idea. In Germany, an article by Reinhold Lehmann appeared in July, 1924, in the *Neue Bahnen* (Leipsig) entitled "The Dalton

* *Christian Science Monitor*, January 28, 1925.

† See University of Colorado *Bulletin*, No. 211, on *The Dalton Laboratory Plan at the University of Colorado*.

Plan." More recently there appeared (in German) *Neue Padagogik im Ausland*—erstes Heft, *Helen Parkhurst's Dalton Plan und seine Verwendung in England*, von Marie Steinhaus. Though Germany may appear to be slow in embracing the Dalton Plan, it must be remembered that during the last few years, the Hamburg School Movement, the Secretary of which is Dr. Fritz Karsen—a movement on distinctly modern lines—has made great headway in that country. The German Government, it was publicly stated two years ago, had purchased the German copyright of Miss Parkhurst's book.

Of some of the other European countries a little more can be said. In Denmark, interest has been aroused by an extended article, issued as a pamphlet, by Th. C. Thors, M.A. of the University of Copenhagen, entitled *Nye Skoleformer i England*; in Sweden, lectures on the Dalton Plan have been delivered by Mrs. Beatrice Ensor, of the "New Era" and more recently, a pamphlet, entitled *Daltonplanen: orienterande framställning*, ab Walter Sundstrom, and setting out the details of the Plan, has been issued. Norwegian papers are now beginning to publish articles on the Plan. Inquiries have also come from Russia—from Leningrad and Moscow—and Professor Trainovsky, well known as a writer of school texts in pre-revolution days, and Madame Marie Steinhaus have translated several of the English books and pamphlets on the subject.* Not much headway

* Dr. Lucy Wilson, writing from Philadelphia (September 15, 1925), after a prolonged visit to Russian schools, says: "More than one thousand schools, mostly secondary schools and

with the Plan has been made in Belgium, mainly, it is believed, because of the excellent work, on principles not altogether dissimilar, though approached from a different standpoint, from those of the Dalton Plan, of Dr. Ovide Decroly; while much the same may be said of France, although there is distinct evidence that the newer movements are beginning to make their appearance there. In Switzerland, however, is centred the work of Dr. Adolf Ferrière, who has much personal acquaintance with schools working on the Plan, and whose influence in the "New Education" movement in Europe is very great indeed. Those responsible for starting schools for the secretariat of the League of Nations' organisation at Geneva are also familiar with the working of the Dalton Plan, while in some of the many retreats to be found in that delightful country, many schools have been established where Dalton principles are practised.

But of all the European countries taking up the Dalton Plan, perhaps Holland stands out most prominently, and it is because the writer is more familiar with the development of the movement there, that he ventures to refer to it at greater length. It was in January, 1923, that a Deputation consisting of Professor Ph. Kohnstamm, Ph.D., Lecturer in Education, University of Amsterdam; Mr. Bigot, Director of the Training College at

colleges, experimented with the Dalton Plan last year. This year it has been officially adopted for secondary schools and higher schools with adequate equipment. I was very much delighted to observe that they had no idea of blindly following the book, that, on the contrary, each teacher was conscious of the necessity of adapting the Plan to the children and the work."

Arnhem ; Mr. Diels, Head of a large primary school in Amsterdam ; and Dr. S. C. Bokhorst, of the Amsterdam Lyceum, came to England to carry out an investigation of methods of Individual Work. They visited about a dozen schools of various types where individual methods were in progress, and, on their return, issued a report which occupied a complete issue of the *Volks Ontwikkeling* (April, 1924). This report was distinctly favourable to the Plan and to its introduction into the Dutch Schools. Later, Dr. Bokhorst published separately his extended pamphlet *Het Dalton Stelsel* (voor het middelbaar en M. V. L. onderwijs). In addition, the present writer's previous volume, *Individual Work and the Dalton Plan*, under the title of *Individueel Werk en het Daltonplan* (translated by Mrs. J. E. Prins Willeker-Macdonald), has been issued in a Dutch Edition. Quite recently, the writer attended a conference organised by the "Bond van scholen voor Neutraal Bيزonder Onderwijs in Nederland," held in Utrecht, and attended by close on three hundred teachers and administrators representing various types of schools. Papers were contributed by Miss Schalij of the Nieuwe Schoolvereeniging in Amsterdam (headmaster Mr. Vry), Mr. Wilson of Blumendal, and Mr. Overdiep of Groningen. The papers described various experiments : Miss Schalij spoke of her work with four large tables in one room a work which has lately been extended to nearly all the classes in the school ; Mr. Wilson and Mr. Overdiep of full-dress experiments, comprising subject rooms, specialists, and so on, the former in a select district, and the latter in a less select one. All that need

be said of the conference is that it followed the usual lines. Questions and discussion seemed so familiar that one might have supposed himself in any one of the many English conferences on the Plan which have been held during the last few years. Discussion disclosed the fact that many teachers in Holland were experimenting on similar lines. All who spoke expressed pleasure regarding their early adventures in the work and were convinced that their children were happier. They supported to the full the claim of the British Dalton Association that "more and better" work results from the adoption of the Plan. It may not be out of place to reproduce here Miss Schalijs's "Impressions" which she kindly sent (in English) to the present writer :

"During four months I have followed the Dalton system in my class. I began in September and the result has surpassed my expectations. I have 22 pupils. In my classroom there are four large square tables. At each table there are six little chairs, two at each side, so that one side always remains open. In this way, there is sufficient room for the pupils who wish to make use of any educational apparatus.

"In this lower form, the pupils have their fixed seats (for class lessons), yet I very often give them new places so that all the children of the class can communicate with each other. On the other hand, again, I, now and then, allow them to choose their own table companions ; and it is interesting to see which children feel attracted to each other. Along the wall are sets of pigeon-holes in which children can put away their things.

"On the wall is a clock, and some small blackboards with exercises on them, which must be committed to memory and for which I take every day a short fixed

time. In one of the corners of the room is a table with some small bead frames, some boxes for learning tables of multiplication, some boxes with coins, and some little clocks in pasteboard. On another table is a little free library consisting of three groups of books. I indicate the degree of difficulty by the colour of the cover.

“Every morning I begin with Arithmetic for a quarter of an hour—they may do this individually, or as a class. From 9.15 to 9.45 there is silent individual work, with assignments in arithmetic, language, and reading. (Here follow specimen assignments.) If the children are reading, they begin the task indicated on the blackboard and set to work. In the beginning there is a little commotion in the class—some pupils are softly discussing the matter, but, generally, after about five minutes every child is at work, and this atmosphere of working remains with all of them until the assignment is finished. I myself am mindful of Dr. Montessori’s words :

‘ Le maître, doit au lieu de la parole apprendre le silence, au lieu d’enseigner observer ’—

quietly sit down to my own work. If a pupil is quite at a loss with his work, and if a neighbour cannot help him, he may come to me.

“The pupil who has finished his work writes his number on the blackboard. I examine his work and mark the mistakes: he corrects them. Then the moment has come that he may do what he likes. I indicate the direction. In our scheme of working stands: Intellectual instruction 9.15 to 9.45. So the pupils are not allowed to do needlework, manual work, or drawing—we practise these in the afternoon. The pupils must try to develop themselves in their own direction, or occupy themselves with one subject for which they feel they must do some extra work.

“It is striking how well the children learn to realise

this. Some of them are going to read, others practise arithmetic, others, again, study the difficult words of their language lessons, or try to write a little composition. . . .

“The monthly lists we make use of are certainly a great help. Every day the pupils themselves write down the position they have reached in their work. Once a week I give arithmetic and language work for examination. I show the results of these in red ink in the monthly lists. If there are particular observations to be made I add them. So the children see every day in which subject they fall short and in which subject they will have specially to exert themselves. And they do this earnestly and more accurately than might have been supposed of these seven years' old children.

“I am able to point to an atmosphere of contented activity in my class. As for myself, I feel it necessary to control the work of the children. In this lower form I am able to correct all the work during schooltime.

“The children feel themselves responsible for their tasks—they must be finished. So when a pupil happens to be a little unfortunate with his work, he takes care to set this right in the course of the day. I control this very strongly, and it is my experience that children need this control.

“If I compare this class with other similar classes of former years, I can state that the class is certainly up to the mark so that we can go on with this experiment with the greatest confidence as to the result. Several experts in teaching have attended the lessons in my class for some hours. It struck them all with how much interest and cheerfulness the children accomplished their assignments without any compulsion, whereas the children's attention was not distracted even when a visitor walked through the class or spoke softly to me.

“The director of a training college in Friseland

said: 'By this visit, clouds of difficulties have been blown away.' Another expert in teaching, who had visited many schools in England, said he was struck with the earnestness and delight with which the children did their work.'

"On Saturdays, I reserve an hour to arrange the work that has not been finished during the course of the week. Who need not do this may occupy this hour according to his own taste, for is not one of the Dalton principles 'Learn to use your time well'?"

The substance of this paper, with others, as well as the questions and discussion, were published in Nos. 8 and 9 (1925) of the *Correspondentie Blad*.

A word or two should be said of the movement in China and Japan. Miss Parkhurst herself has carried out extensive lecture tours in the latter country, many of whose leading educationists and practitioners have visited England in their desire to see the Plan working. In China, much the same thing is happening. Nearly two years ago, an Exhibition of Dalton Work was organised at Peking University. The following is an extract from a letter received from a Chinese teacher (1923) and tells its own story. It is addressed from Nanking:

"From last October, when we first adopted the Dalton Plan in Woosung Middle School, there are more than thirty schools, both middle and primary, adopting it and the number is increasing. The Summer School of the South-Eastern University will have a course upon it. I wrote six articles on the Plan, which were distributed to the various Chinese Educational Reviews, and a book, entitled *The Outlook of the Dalton Plan*. I am now preparing a work entitled *How to teach under the Dalton Plan in Chinese Schools*."

The University of Peking invited Mrs. Parkhurst to visit China during the summer of 1925, and give courses of lectures there and in other places in China. The greatest interest and enthusiasm were shown, and many hundreds of teachers from all parts of China attended.

Apart from all this, the League of Empire, the League of Nations' Union, and the leading Missionary Societies have all taken a great interest in the Plan. The Imperial Education Conference attended by 400 delegates from various parts of the Empire, at its last meetings (1924), devoted a whole session to discussing Dalton work.

In the opening paragraph of this chapter it was pointed out that in the short space of five years the Plan had aroused a world-wide interest. It is possible that what has been written above is a sufficient though certainly an understated indication of the truth of this; in any case, it is some evidence of the extraordinarily wide range through which the idea has spread. At the same time, it must be made clear that a world-wide interest is not, in itself, assumed to be an entire justification of the claims made for the Plan: it is, however, an indication that teachers and administrators everywhere are desirous of keeping abreast of the latest thought with regard to one of the most widely discussed developments in educational practice.

RÉSUMÉ

As a last word, the author wishes to reiterate his own firm belief in the principles for which the Dalton Plan stands, and his conviction that they are psychologically and educationally sound. Whether or not they can be adopted universally in elementary and secondary schools, or whether such universal adoption is desirable in such fashion as makes them succeed, not only socially but educationally (though social efficiency must surely include educational efficiency), it is the business of more and more experimenters to discover. The time has not yet arrived for final judgments, though thus far there is a great deal of positive evidence that the Plan succeeds, and is of tremendous scholastic advantage, where it is honestly tried by those who really understand it. There is much evidence, too, of a negative kind, to show that there is no reason why a school organised on Dalton lines should reach a standard of work lower than that reached under any other method. What is fairly certain is, in the first place, that there was need of some change from the old class method where teaching occupied most of the day—a method which in the past had been glorified out of all proportion to

its usefulness (this is shown by the wide discussion of the Dalton principles throughout the world); and in the second place, that, though it may be presuming too much at present to say that the Dalton Plan has come to stay, it may yet be said, with the utmost confidence, that certain features of the Plan will without doubt find a permanent place in the educational practice of the future.

It is not unlikely that in the near future considerable change will be effected in the arrangement of schools along the lines of greater provision of more advanced instruction, than is at present provided, in the upper classes of the elementary schools. This is a problem of reorganisation that will have a wide significance, and portends a number of types of schools, suited to the varying needs of pupils ranging from the earliest school age to that of the secondary school, and even to the university. What has already been done in the cities of Leicester, Carlisle, Nottingham, and elsewhere, is an indication of the probable lines along which advance will be made. When all this is accomplished, there will be room, and possibly a greater need, within the school for some such organisation as that of the Dalton Plan; indeed, one can conceive in such circumstances that the need of such reorganisation within the school will be almost imperative.

APPENDIX I

THE following are the Syllabuses of Assignments for the four Contracts of the "Individual" Art Course, now added to the series :

CONTRACT I

(Not including "Memory" work and "Illustrative" work)

Assignment

1. Instructions in handling tools and materials : (a) Pencil,
(b) Water Colour, (c) Pastel.
Construction : a Portfolio.
Rhythm.
2. Plant study for design.
Picture study.
3. Object drawing and pictorial arrangement.
Figure drawing (skeleton).
4. Colour : Primaries and secondaries.
Picture study.
Colour : Matching.
5. Lettering.
6. Construction : Book-sewing.
Design and lettering.
Colour : Harmonies, first rules.
" " Exercises.
7. Object drawing and application to design.
Costume.
8. Pictorial arrangement of out-door scene : Christmas cards.
Plant study applied similarly.
9. Life and action : Human.
Life and action : Animals (homework).
10. Poster : General approach.
History poster and notes.
Advertising poster.

"MEMORY" DRAWING

(10 minutes per drawing)

Assignment

1. Table knife. Spade. Flower pot. Tongs.
2. Spoon (front view). Fork (front view). Boot. Door lock.
3. Loaf. Broom. Shopping basket. Shopping basket (another kind).
4. Hot-water bottle. Shopping bag. Medicine bottle. Scissors.
5. Chair (side view). Spoon (side view). Fork (side view). Pipe.
6. Hen. Poker. Cup. Glass.
7. Bowl. Rolling-pin. Water-can. Handbag.
8. Trunk. Shovel (front view). Shovel (side view). Garden fork.
9. Cup and saucer. Rabbit or dog. Dish mop. Hat.
10. Cap. Saucepan. Bath. Dustpan.

"ILLUSTRATIVE" DRAWING

- | | |
|--|--|
| 1. Boy's Song.
Helping Mother.
Mulberry Bush. | 6 Forsaken Merman.
Discovery.
Tommy Tittlemouse. |
| 2. Nod.
Old Curtain Camp.
Margery Daw. | 7. Merchant of Venice.
One Misty Morning.
Little Bo-Peep. |
| 3. Pied Piper.
Old Mother Goose. | 8. King of the Golden River.
Winter Games.
Three Blind Mice. |
| 4. Atlas.
The Windmill (H. W. L.).
Ring-a-roses. | 9. A Good Game (Indoor).
10. Goblin Market.
Little Road says "Go,"
Little House says
"Stay." |
| 5. Hiawatha.
Oranges and Lemons.
Four Ducks on a Pond. | Jack be Nimble. |

CONTRACT II

(Not including "Memory" work and "Illustrative" work)

1. Colour : Dead leaves. Colour in rug design.
Tone Value : Scale.
2. Design : Drop repeat. Stick printing.
Colour : Complementaries.
3. Picture study : Balance.
Design : Trade-marks.

Assignment

4. Design : Bookplates.
Plant study and design.
5. Figure drawing : General proportions. Proportions of
Head (front view).
Design : Vase shape.
Object drawing. Toy. Squared drawing.
6. Lettering : Posters.
Construction : Album for leaves. Cover decorated.
7. Picture study : Proportion diagrams.
Plant study.
8. Plant study (*continued*) and design.
Figure study : Head (side view).
9. Poster : "Lemonade."
10. Figure study and costume.
Colour wheel.

" MEMORY " DRAWING

1. (a) Lilac leaf ; (b) hammer ; (c) armchair ; (d) copper lid.
2. (a) Ivy leaf ; (b) key ; (c) door ; (d) gate latch.
3. (a) Sycamore leaf ; (b) chisel ; (c) vegetable dish ;
(d) thimble.
4. (a) Rose leaf ; (b) saucepan ; (c) dorothy bag ; (d) toy
boat.
5. (a) Poplar tree ; (b) pinchers ; (c) soap-dish ; (d) washing-
basket.
6. (a) Horse-chestnut leaf ; (b) two keys on ring ; (c) glass
water-bottle ; (d) postman's hat.
7. (a) Plantain ; (b) mallet ; (c) kitchen table ; (d) hand-
brush.
8. (a) Lime-tree flower ; (b) shears ; (c) coal scoop ;
(d) travelling trunk.
9. (a) Dandelion leaf ; (b) screwdriver ; (c) shoe ; (d) cat
(sitting).
10. (a) Clover leaf ; (b) wheelbarrow ; (c) chicken ; (d) a
wooden gate.

" ILLUSTRATIVE " DRAWING

1. (a) Lady of Shalott (*ext.*) ; (b) Jack Spratt ; (c) Leapfrog.
2. (a) The *Argo* ; (b) Little Miss Muffet ; (c) Washing Day.
3. (a) Nature Poem (Lit. Assignt.) ; (b) Hark ! Hark ! The
Dogs do bark ! (c) Peg-tops.
4. (a) Loss of the *Eurydice* ; (b) Hey Diddle-diddle ! (c) The
Circus.

Assignment

5. (a) As You Like It ; (b) Ride a Cock Horse ; (c) A Picnic.
6. (a) Gulliver's Travels ; (b) Ding-dong Bell ; (c) A Sudden Shower.
7. (a) The Enchanted Shirt ; (b) Diddle-diddle dumpty ; (c) Cat's Meat!
8. (a) The Water Babies ; (b) The House that Jack Built ; (c) Spring.
9. (a) Macbeth ; (b) Little Cock Sparrow ; (c) Good-bye.
10. Chosen from above.

CONTRACT III

(Not including "Memory" work and "Illustrative" work.)

1. Colour : Revision of harmony. Hues. Colour Scheme for interior wall.
2. Interior decoration : Proportion. Colour.
3. Lettering : Script with broad pen.
4. Construction : Album for picture collection.
5. Lettering of above album.
Picture study : Rhythm.
6. Nature study : Trees.
7. Object drawing : A bowl. The ellipse.
Figure drawing : The "Action-line." From model ; from Memory. Composition.
8. Plant study and design.
9. Lettering and design : Decorated initial.
Pattern design : Chequer and modified chequer. Applied decoration.
10. Costume : Carnival, etc.
Interior decoration : Kitchen furniture.

"MEMORY" DRAWING

1. (a) Oak leaf ; (b) kettle ; (c) door-knocker.
2. (a) Pine leaves ; (b) pillar-box ; (c) gas-ring.
3. (a) Hawthorn leaf ; (b) handsaw ; (c) inkpot.
4. (a) Acorn ; (b) plane ; (c) lamp-post.
5. (a) Spray of haws ; (b) tenon saw ; (c) open book.
6. (a) Pine or fir cone ; (b) gimlet ; (c) swan.
7. (a) Buttercup leaf ; (b) trowel ; (c) duck.
8. (a) Groundsel leaf ; (b) pliers ; (c) pair of spectacles.
9. (a) Snail shell ; (b) potting trowel ; (c) purse.
10. (a) Spider ; (b) window catch ; (c) coalscuttle.

" ILLUSTRATIVE " DRAWING

Assignment

1. (a) " That age is best that is the first " ; (b) Georgie Porgie ; (c) A herdsman on the lonely mountain top.
2. (a) Young Lochinvar ; (b) Hushabye Baby ; (c) A cottage perched upon the green hilltop.
3. (a) Plague of London ; (b) Tom, Tom the Piper's Son (I.) (c) Interrupted.
4. (a) The Wind in a Frolic ; (b) Tom, Tom the Piper's Son (I.) ; (c) The Beginner.
5. (a) The Village Blacksmith ; (b) I saw a ship a-sailing ; (c) A Fisherman's Yarn.
6. (a) The Highwayman ; (b) Carrion Crow.
7. (a) Treasure Island ; (b) The Three Wise Men of Gotham ; (c) Who did it ?
8. (a) " Ecstasy " (W. J. Turner) ; (b) Rain, Rain go to Spain ; (c) That Troublesome Dog !
9. (a) Try your Skill ; (b) Simple Simon ; (c) Castaways.
10. Chosen from above.

CONTRACT IV

(Without " Memory " and " Illustrative " Exercises)

1. Colour : Split complementary.
Tints and shades : Tertiary colours.
2. Interior decoration : A play-room.
Construction : A pin-tray.
3. The Roman Alphabet.
4. Picture study : Harmony and contrast.
Medial section.
5. Poster.
6. Lino block : Cutting and printing.
Black and white.
7. Out of doors : Sketching about town.
8. Lino block : Colour printing.
- 9, 10. Marionette theatre.

" MEMORY " DRAWING

(For the Fourth Exercise, Copy from Memory the given Drawing)

1. Cat ; sack-barrow ; axe.
2. Dog sitting ; coster's barrow ; water tap.
3. Dog standing ; two-wheeled cart ; gas burner.
4. A small bird ; folding step-ladder ; oil-lamp.

Assignment

5. Horse ; saddle ; piano stool.
6. Horse's head ; bridle ; a knotted rope.
7. A cow ; mangle ; candlestick.
8. A sheep ; baby's chair ; violin.
9. Boy throwing a ball ; chimney ; motor van.
10. A baby ; a pipe-rack ; a cradle.

“ ILLUSTRATIVE ” DRAWING

(With the exception of the first Assignment, each has for one of the three, the subject of the previous month's Literature)

1. (a) “ Roadside fire ” (R.L.S.) ; (b) A Frog he would a-wooing go ; (c) The Fugitives.
2. (b) Oranges and Lemons ; (c) The Journey's End.
3. (b) Little Polly Flinders ; (c) The book-worm.
4. (b) Mary had a little Lamb ; (c) Conspirators.
5. (b) Barber, barber, shave a pig ; (c) Once upon a time.
6. (b) If all the seas were one sea ! (c) Whitewash.
7. (b) The old woman tossed in a blanket ; (c) Enchantment.
8. (b) Four-and-twenty tailors ; (c) “ Conceit.”
9. (b) Poor old Robinson Crusoe ; (c) Hearty Cabbage.
10. Chosen from above.

APPENDIX II

BIBLIOGRAPHY

THE DALTON PLAN

<i>Title.</i>	<i>Author.</i>	<i>Publisher.</i>
Education on the Dalton Plan	Helen Parkhurst	G. Bell & Sons.
The Dalton Laboratory Plan	Evelyn Dewey	J. M. Dent & Sons.
Individual Work and the Dalton Plan	A. J. Lynch	Geo. Philip & Son.
The Rise and Progress of the Dalton Plan	A. J. Lynch	Geo. Philip & Son.
Individual Work in Infants' Schools	J. M. Mackinder	The Educational Publishing Co.
Towards Freedom (Secondary)	Mrs. M. O'Brien Harris, D.Sc.	University of London Press.
A Single Class on the Dalton Plan	J. A. Radcliffe	G. Bell & Sons.
Papers on Individual Teaching (apparatus and schemes of work)	Various Authors	National Union of Women Teachers.

SPECIAL ARTICLES

Modern Developments in Educational Practice :	Sir John Adams, M.A., B.Sc.,	University of London Press.
"The Dalton Plan"	LL.D.	
Educational Movements and Methods :	C. W. Kimmins, M.A., D.Sc.	G. Harrap & Co.
"The Dalton Plan"		
The New Era in Education (Ed. by Ernest Young, B.Sc.):		
"Independent Study in a Girls' Elementary School"	—	Geo. Philip & Son.
"Teach Yourself"	O. M. Andrews	" "

REFERENCES IN OTHER BOOKS

<i>Title.</i>	<i>Author.</i>	<i>Publisher.</i>
Bergson and Education	Dr. Olive Wheeler	Longmans.
Citizen and the School	P. B. Showan, M.A.	Camb. Press.
Instinct, Intelligence, and Character	Godfrey Thomson, D.Sc.	Geo. Allen & Unwin.
The Foundations of Education, Vol. I.	J. J. Findlay, M.A.	Univ. of London Press.
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What is, and what might be	Ed. G. A. Holmes	Constable.
In defence of what is and what might be	Ed. G. A. Holmes	Constable.
A Path to Freedom in the Schools	Norman Munn	Mac- G. Bell & Sons.
A Child's Path to Freedom	Norman Munn	Mac- " "
Education: Its data and First Principles	T. Percy Nunn, M.A., D.Sc.	Ed. Arnold.
Freedom in Education	Mrs. Millicent Mackenzie, M.A.	Hodder & Stoughton.
The Montessori Method	Dr. Maria Montessori	Heinemann.
School and Society	John Dewey	Camb. Press.

PAMPHLETS

The Dalton Plan in the Elementary School:		
(a) Without Subject Rooms or Specialists	Miss Kate Rose	Dalton Association.
(b) With Subject Rooms and Specialists	A. J. Lynch	" "
An Educational Experiment at Bedales School	J. H. Badley, M.A.	" "
Memorandum on the Dalton Laboratory Plan of organising schoolwork (Secondary)	The Headmaster	" "
The Sub-Dalton Plan	Miss E. M. Cook, LL.A.	" "

REPORTS OF CONFERENCES

Conference on the Dalton Plan in Secondary Schools (1923)	Dalton Association, 24, Royal Avenue, Chelsea.
Various Annual Reports of New Ideals in Education Conferences (especially 1923)	9, Brunswick Square, W.C.1.
Various Annual Reports of Conferences of Educational Associations (containing Annual Reports of the Dalton Association)	League of the Empire, 124, Belgrave Road, S.W.1.

PERIODICALS

The New Ideals Quarterly (organ of the New Ideals in Education Committee and of the Dalton Association) ..	Basil Blackwell, Oxford.
The New Era (organ of the New Education Fellowship)	11, Tavistock Square, W.C.1.
The Reader (organ of the National Home Reading Union—especially articles by the Rev. and Hon. Ed. Lyttelton, D.D.)	12, York Buildings, Adelphi, W.C.1.
The Times Educational Supplement, The Schoolmistress, and the Teachers' World frequently print and also special articles on the Dalton Plan and Individual work.	Reports of Conferences, and also special articles on the Dalton Plan and Individual work.

The following publications are also available :

<i>Title.</i>	<i>Author</i>	<i>Publisher.</i>
The Dalton Plan in Australia	Frank Shann, M.A.	Ramsey Publishing Co., 203-7, King Street, Melbourne.
The Dalton Laboratory Plan	University of Colorado	Boulder, Colorado.
"The Leaflet" (organ of the Wanganui Ed. Board) ..	Various Authors	Education Board, Wellington, N.Z.
The Dalton Plan	Sri Ram Tew- ary, M.A.	Steam Press, Luck- now.

ASSIGNMENTS

<i>Title.</i>	<i>Publisher.</i>
Dalton Plan Assignments : (Introduction Book i. English, History, Geography Book ii. Mathematics, Science)	Geo. Bell & Sons. by Rosa Bassett, M.B.E., B.A.)

Individual Work Assignments (Four Years' Course)	Ed. by A. J. Lynch, Headmaster, West Green School, Tottenham	Geo. Philip & Son.
English Composition and Language	Contracts 1, 2, 3, 4	W. R. Arnold.
Literature	,, 1, 2, 3, 4	F. M. Moore, B.A.
Arithmetic	,, 1, 2, 3, 4	J. L. Hillier.
Geography	,, 1, 2, 3, 4	H. B. Priest.
History	,, 1, 2, 3, 4	E. S. Marriott.
Natural Science	,, 1, 2, 3, 4	F. E. Sharp.
Drawing	,, 1, 2, 3, 4	F. E. Sharp.
Art Course	,, 1, 2, 3, 4	Joseph Hicks.
English on the Dalton Plan	John Eades	Arnold of Leeds.

RECORD CARDS

"Individual" Record Cards (Scholars')—four colours	Geo. Philip & Son.
Scholars', Teachers', and House Graphs—various colours	Educational Supply Association.

There are numerous publications in Dutch, Swedish, Danish, German, Russian, Chinese, and Japanese.

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