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- Erith’s New Senior School...........................................A. J. LYNCH
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Outlook Tower

This issue of THE NEW ERA is devoted to the teaching of Mathematics, and we have been fortunate in securing the services of Dr. P. B. Ballard as Editor of this special number. He has also been kind enough to contribute the leading article, and we are greatly indebted to him for his valuable help.

It seems natural to regard mathematics—pure mathematics at any rate—as free from the mutability that falls to the lot of other school studies. Its antiquity, its well-defined intents, its prestige and its traditions, all tend to stabilize both the subject matter and its mode of treatment. And yet those who have had opportunities of observing the teaching of mathematics in the schools for the last thirty years can testify to changes no less profound than those which have taken place in the more cent importations into the school programme. Other evidence were lacking, the articles in is issue would be testimony enough. Thirty years ago they could not possibly have been written. They point not only to changes in the past, but also to likely, or at any rate desirable, changes in the future.

The Beginnings

In no part of the course is the difference between the old and the new more marked than in the early stages—in the mathematical pursuits (they cannot be called lessons) of the nursery, the kindergarten and the infant school. The extent of the reform initiated by Froebel and Pestalozzi and developed by Dewey, Decroly and Montessori, is made abundantly obvious by the articles of our two foreign contributors. The new methods ensure that the foundations are sound; they ensure that the whole structure is based upon the child’s personal experiences; they ensure that the symbols used are not mere counters but true intellectual coinage standing for real relationships in the world of space and time.

The Neglect of Geometry

The branch of mathematics that has most signally failed to find its proper place in the school is geometry. At each end of the elementary school it has a slight and uncertain foothold; in the middle, it has no foothold at all. Why it should be so grossly neglected is difficult to understand. It is not intrinsically dull and uninteresting; it is not alien to children’s tastes; it is not outside the range of their daily experiences. On whatever grounds its value may be judged, its claims for admission to the mathematical course are far stronger than those of certain dismal sections of the arithmetic syllabus to which teachers and examiners cling through the force of mere inertia. Even the slight attention which the subject receives in the elementary school is not always wisely directed; nor indeed is the much greater attention which it receives in the schools of higher learning. There still remain secondary schools where all the possibilities of the subject are not yet fully realized, even though those possibilities were foreshadowed as early as 1914 in the Board of Education Circular 851, and were indeed exemplified in the books of Godfrey and Siddons. I infer from what Mr. Atkin says in his article that though we often teach the right thing in the wrong way and the wrong thing in the right way, we rarely teach the right thing in the right way.

One point is clear: we often approach the study of geometry in quite the wrong way. We try to proceed logically from points and lines to surfaces, and from surfaces to solids, which is the precise opposite of the route through which nature leads us. The child’s first experience is
with the solid framework of the universe. He lives in a three-dimensional world and thinks in three-dimensional terms. His elements are real substances: his lines are threads, his surfaces are sheets, his very points are small fragments of the material world. It is only gradually that he abstracts these elements from their concrete setting and is able really and truly to geometrize. In fact we plunge him too easily and with too little preparation into the study of formal plane geometry.

To the last generation of pupils (or should I say to the last generation but one?) geometry was introduced in two forms: as a branch of drawing and as a branch of logic. The branch of logic was labelled *Euclid’s Elements of Geometry*. In geometrical drawing the pupil had to follow instructions; in the study of Euclid, he had to follow a line of reasoning the full significance of which he rarely grasped. The former was geometry without thought, the latter geometry without vision. The path mapped out by our contributor suggests that the cultivation of vision and of the power to think deductively should proceed side by side.

The Reform of Algebra

Algebra has fared better. Its reform, which now proceeds apace, received its greatest stimulus when Sir Percy Nunn published his *Algebra* in 1913. Before that it was customary to begin the course with the manipulation of symbols, a process which was almost void of meaning to the young pupil as it failed to connect what he was doing either with the arithmetic he had already learned or with any of the practical purposes of life. The new teaching aims at investing the study with meaning and with purpose. To do so, it must start by making contact with life as the child knows it. Some believe that the equation does this better than anything else; others favour the formula. Both Professor Nunn and Mr. Durell do so. Not only does Professor Nunn point to the formula as the best avenue of approach, but he has also familiarized us with the notion of directed and non-directed numbers—a distinction based on the two separate functions of each of the signs + and −, one to indicate an operation with numbers and the other to indicate a quality or direction in the numbers themselves. In the past this distinction was but vaguely felt; but to-day it is clearly held in the mind of the teacher if not of the pupil.

Mr. Durell’s article is full of helpful suggestions. His plea for some measure of relief from the pressure of the School Certificate Examination will strike a responsive chord in many a heart; and the scheme he outlines indicates how the algebra course may widen out into fruitful fields and contribute more fully to the pupil’s general culture.

Music and Mathematics

Mr. Hamilton’s article should do something to dispel the mists which obscure the relationship between music and mathematics. That there is some sort of connection is a belief to which mankind has clung since the days of Pythagoras. It appears in one form in the saying ascribed to Leibnitz that music is arithmetic when we don’t know we are counting. It is the arithmetic of the unconscious. But whatever the nature of the connection may be, I agree with Mr. Hamilton in his conclusion that it is not one which will serve educational purposes. We cannot teach music through mathematics, nor (worse luck) can we teach mathematics through music. Nor is there any evidence that intellectual powers gained by one of these studies overflow into the other. Some years ago, an extravagant claim was made on behalf of the Dalcroze method. It was maintained that it improved the children’s memories and increased their capacity to do mental arithmetic. Professor Cyril Bur (this was before his professorial days) and myself were asked to investigate the problem. After a prolonged experiment, we failed to find the slightest foundation for the belief. The bond that joins music to mathematics is so deep down in the human mind that no teaching can touch it. Let us be content to leave it there.

Premature Teaching

I have left to the last the articles by Miss Margaret Drummond and Dr. Carleton Washburne. Despite their superficial similarity as they seem, they both raise the same fundamental problem—a problem which is of vital importance to the teaching of mathematics and is yet far from being solved. Miss Drummond shows with admirable clarity what the problem is. She asks whether we are no
frequently guilty of premature teaching, of trying to instil knowledge into minds which are not yet ready to receive it.

If what Dr. Washburne says is true, we are guilty to a far greater extent than is suspected even by Miss Drummond. Indeed the results presented by Dr. Washburne are so staggering in their significance that one cannot feel comfortable in one’s mind until those results are either confirmed or disproved on this side of the water. If they are confirmed, then our arithmetic programme is wholly discredited—both in respect of its contents but of its chronology. It is wrongly timed. We teach the basic operations far too early. The bulk of the work now done in the junior school should be left for the senior school. Dr. Washburne singles out long division for his comments. But long division does not specially stand out of the procession. The optimum age for short division is only five months earlier. The pertinent fact is that the customary age in England is three or four years earlier for the whole group than the age stated as desirable. And if Dr. Washburne is right, Dr. Montessori is still more conspicuously wrong.

There is one factor which Dr. Washburne does not seem to have taken into consideration, and that is the relative influence of good and bad teaching. That factor, after the very early stages with which Miss Drummond is mainly concerned, may prove to be the crux of the whole problem.

Elementary Mathematics at the Decroly School

A. HAMAİDE

The teaching of Arithmetic in the Ecole de l’Ermitage is based entirely on observation, for through observation the children find innumerable opportunities of measuring and comparing. Observation implies more than mere perception: it establishes the relationship between the various aspects of any object, between breadth and depth, light and shade. It implies too the consideration of temporal and spatial relations and the making of comparisons, the analysis of resemblances and differences. Such observation builds a bridge between the material world and the abstract world of ideas. In order to make observation more exact, measurement and calculation are obviously necessary, and therefore a child’s interest in mathematics is easily roused before he is actually introduced to formal and mechanical exercises in number.

From the first it is essential to take every opportunity of comparing various objects, new and old, familiar and unfamiliar, so that the child is brought to recognize resemblances and differences and to do so with increasing precision. Comparison leads on to exercises in continuous and discontinuous quantities which involve the use of number. But one should never lose sight of the fact that the aim of such teaching is not to introduce the child to one particular method of calculation but to develop in him a power of judgment which will be made more accurate by methods of calculation.

Most of the early work on number, therefore, should rely for data on the children’s observation, and should spring naturally from it. Every lesson in which the child deals with material objects or natural phenomena can give rise to comparisons which may be expressed in number and should be made as precise as possible. The transition from rough comparisons and estimates to accurate measurement can be made in easy stages. For instance, one must first of all compare qualities which cannot be expressed numerically (colour, taste, smell, sound, etc.) and then take those which can be so expressed. Then one can make use of general quantitative terms (much, little, more, less, too much, enough, etc.). With continuous and discontinuous quantities, natural units of measurement must be used from the outset. As soon as possible comparisons bearing on weight, spatial relations, time and value, should be taken, and gradually it is possible to progress from these natural units to the conventional unit of the metric system or the calculation of time.
Number in Everyday Life

In introducing the child to the use of measurements, weights and quantities, a great deal of varied material is necessary. It must be made, collected and used by the children with the help of the teacher. In practical every-day life, number is used to define various relationships: it is based on certain established units which have been generally adopted. These units, especially in the case of continuous quantities, are the conventional measures—the metre, the kilo, the litre; but these units have only been recently adopted. Long ago, and indeed in some places to-day, natural or semi-natural units of measurement are used—foot, thumb, spoon, etc. Before the children are made to use the abstract conventional measures adopted by one section of humanity, it is only rational to give them opportunities of using natural units of measurement for discontinuous quantities. The children are far more interested when they use the methods which nature has placed at their disposal in order to express ordinary every-day comparisons. Tiny children who cannot be trusted with rulers or measures of volume can use their hands, their feet, their arms for measuring lengths and breadths. And they tend to go on using these in their games, and thus gain the constant practice which is essential if they are to be able to measure and calculate with accuracy and ease.

In so brief an article it is impossible to give details of all the various types of measure used, or to give examples of the many kinds of exercises in measurement, counting and calculation, all based on the problems of every-day life, which are used in teaching number at the Ecole de l'Ermitage. Some examples only can be given.

Volume

The equipment is, of course, prepared with the children. At the end of the classroom, on a shelf and in boxes, are measures, a dropper, a wine glass, a soup spoon, a tea spoon, a jug, a cup and various small bottles. This is an example of the way in which they are used:

The children have been growing beans in water, and they are intensely interested not only in the sprouting of roots and stalks but in the fact that the water grows less and less each day. Why? Be-
we were able to say that a pound was the equivalent of a big bunch, and that two pounds were the same as one kilo. The idea of a pound was thus easily grasped, and that of a kilo also.

This system can obviously be applied in many ways: it is especially useful in the case of children who, for various reasons, have lost ground and need to be coached up to the class standard without waste of time.

**Time and Duration**

Usually, academic teaching omits to train the child to appreciate the duration and the nature of time. This is due simply to the fact that it is very difficult to devise exercises and problems which have any significance for children. Telling the time, recognizing the days of the week and the months of the year—these are learnt as verbal exercises and not in connection with a real conception of time. To be able to tell the time does not necessarily imply any idea of the duration of an hour. The relationship between the length of an hour and that of a day, between a day and a week, a week and a month, and so on, is realized by the child because in his own experience events recur at stated intervals—Sundays and holidays, family anniversaries, etc. But these are conventional divisions of time which cannot give rise to direct, and so to speak objective, observation of the duration of time. Although one cannot say that there is any objective idea of duration which is not qualified by other subjective ideas or experiences, still it is of the utmost importance that the child should be made as clearly aware of this fourth dimension as he is of the other three. Exercises which involve the appreciation of duration should therefore have at least as much attention as those which involve spatial dimensions.

For this purpose it is possible to distinguish between three types of duration—short periods of less than an hour, periods of from one hour to
a year, and finally periods of more than a year, such as historical epochs.

In dealing with short periods, one can find ways of measuring based on the regular rhythm of internal or external functions (heart beats, steps, breathing, etc.), and on the rhythm of certain phenomena which have served as the starting point for the construction of instruments for the measurement of time—hour glasses, etc. When teaching children to appreciate longer periods of time, one can again take physiological rhythms involving the regular recurrence of certain feelings at certain times, such as hunger or fatigue. One can say to the child: 'I think it is nearly mid-day, because I'm hungry', or: 'It must be late, because I feel sleepy'. There are also the physical phenomena such as the coming of darkness, the position of the sun, the opening and closing of flowers; there are the recurring seasons and seasonal occupations in farm life, and the movements of birds and animals. One can also use the particular activities which belong to certain days in the life of the home, the school and the town.

Where longer periods of time are concerned, it is impossible to make the work so objective and concrete: the life of the child, that of his parents, a generation, a century, a historical epoch—these necessitate the use of symbols and graphs which can only be given to children who are old enough to work on abstract lines. Children of six to eight learn in many ways to appreciate short periods. For instance, we use a simple device which swings sixty times to the minute, made from a piece of string and a weight made attractively out of a brightly coloured bag of sand in the shape of a figure. The children find out from this which is the quickest at taking off an apron, a blouse, a shoe; at fetching something from another part of the school; at running round the playground, and so on. This type of exercise teaches them to understand the second, the minute, the quarter of an hour, and they learn to do calculations which involve fractions. The following shows the kind of work we do with this pendulum, when teaching children of six to eight:—

Francoise, Janine and Jean were writing a sentence on the blackboard. 'I am the quickest,' said Jean (aged six and a half), 'I did it in 45 seconds.' 'I'm next,' said Janine (aged six), 'I did it in 50 seconds.' 'Then me,' said Francoise (aged six), 'I took 60 seconds or one minute.' Jean said: 'I did it in half a minute and a quarter of a minute. Why! That's three-quarters of a minute!' Janine said: 'So it is. But I did it in a minute all except ten seconds, or in half a minute and twenty seconds, or in half a minute and a third of a minute.' Francoise said: 'Oh, mine's easy. I took exactly one minute or two half minutes.' In this way the children were introduced to the use of fractions, for they spoke of a half and a quarter and a third with perfect ease and comprehension.

The child is enabled to appreciate longer periods, such as weeks, months and years, by means of a kind of calendar diary which is used even with children of six to eight. The calendar is set out on large sheets which correspond to a week or a month or even a year, and which are subdivided into sections so that there is a
pace for each day. Each Sunday and special holiday is marked in vivid colours. Every day the child in charge of the calendar does a drawing representing some topical event in the space allotted for that day. A large circle is often used to represent longer periods. In the centre a clock is drawn and the circle divided into twelve equal parts, each of which represents a month and is in turn divided into days. Each group of three months represents a term and is coloured to show the seasons. These pictorial calendars help the children to grasp the idea of even longer periods, and prepare the way for graphs and diagrams representing the duration of the various historical epochs.

In helping the children to reach some understanding of periods of longer duration, many comparisons are made. For instance, the short life of animals and insects is compared with the life of the domestic animals and others whose development is complete in two or three years. This is again compared with human life, and the length of the child’s life is shown in relation to the period during which its parents, grandparents and great grandparents have lived. Pictures are made in which the generations are superimposed, each generation being represented by a figure cut out in paper and wearing the dress of the period. Some of the main trends and events in the history of the last century are represented by drawings.

**Number and Direct Perception.**

It will be clear, therefore, that all the work is based on direct perception, that the child measures, weighs, and in every case acts, himself. The aim in view is not primarily the acquisition of a technique of operation—that is only of secondary importance—but the formation of a logical and accurate judgment rendered more precise by the aid of measurement.

As for the more complex operations, those involving decimals, for instance, these are never introduced until the child himself realizes the need for greater accuracy in his researches and brings to the situation the resulting interest, and in consequence a greater facility. A new process in arithmetic, for instance, is never given to the child until he can apply it to problems that he has already discovered for himself.

As little by little he learns the various numerical combinations, he has constant opportunities for returning in case of difficulty to direct perception. Frequent use is made of Dr. Decroly’s number
THE principles of the Montessori method are strikingly illustrated in the teaching of arithmetic and geometry. In applying her methods to more advanced work, Dr. Montessori does not cease to insist upon the necessity for protecting the inner powers of child-life. She considers the fact of learning, not so much as a function of the school as of life itself. The school must above all protect the spontaneous activity of the child and of the school-child in particular.

Arithmetic is one of the sciences which made the most rapid progress in ancient times. To-day it is often a stumbling block in ordinary schools; many people have tried to make it interesting to very young children by teaching it in the form of riddles. They administer it to the older ones in minimum doses of a few briefly expressed theorems, and a scheme of preparation for examinations arranged so that the scholar studies only what is strictly necessary. Demonstrations are given to minds unprepared to appreciate them and at an age when interest in them is absent.

Arithmetic—Early Stages

The Montessori method follows very different lines, as the following illustrations, though necessarily brief and incomplete, will suffice to prove. Let us begin with the children of about four years old. For them there are the rods. There are ten of them; they are related to each other as the numbers from one to ten: the longest is exactly ten times the length of the shortest. On each rod the number it stands for is shown by the alternating colours of red and blue. The children place them in order of size. The ten-rod is easily recognizable from its size, and it contains ten segments of alternating colours, each segment being equal to the shortest or one-rod.

The children learn to count on the rods, but this does not take long and is only a preliminary. The important work is the discovery of the relations between the rods. Very little is needed to attract the children’s attention to this. For instance, if we add the one-rod to any other rod we obtain the exact length of the rod which comes next in length: \(2 + 1 = 3\), \(3 + 1 = 4\). The child finds this study extremely interesting; he will place the one-rod end to end with each of the others. One might say that he is actually discovering the natural series of numbers. This would not be so clear if he were merely using a number of loose objects, for the adding of one to a group of objects is merely the adding of one to a number of ones.

Let us take another example. One is placed end to end with nine, and ten is obtained: it is exactly the same length as the ten-rod, only it is made up of two rods. We set two end to end with eight and have another ten. Three and seven set together form yet another ten and so do six and four. The child observes the arrangement of these rods and gains some idea of how a quantity is formed, and this is almost a revelation to him. While the ten-rod is one, these four other tens, each built up of two rods, are all different from each other. The children are always intensely interested in building up the length of ten by twice setting out the five-rod. They also take the two-rod and count how often they can place it on the ten-rod. Two operations,
addition and multiplication, are clearly shown in these activities, in which the children take the keen interest of the explorer.

As we have seen in the case of ten, one and the same quantity can be built up in very many different ways. There are cards made to serve as a guide and the children soon know by heart all the possible additions of the first nine numbers. They can also put a number of rods together and form one rod of immense length. What is in other methods mere frigid additions is here constructive work and a living experience. It is of course possible to form a long rod by using only one rod set out many times over. Sometimes a child will try to find out how many twos there are in nine: one is left over; and children of between four and five years of age are able to recognize the rods upon which one can place two a number of times without remainder.

These first experiences enable little children to form clear and precise ideas which much older children are often unable to grasp.

The more advanced material is small in size, for it includes large numbers such as 1,000. As regards mental arithmetic, the following exercise is interesting. The numbers one to ten are represented by little bars of glass beads. Each number has its own particular colour, so that it is easy to recognize nine, for instance, without counting the nine beads. We lay a number of these bars in a row, forming, as it were, a serpent. Suppose the first bar is nine, the second six. The child does not count the nine, for he has already recognized it; but he goes on to count ten on the first bead of the second (or six) bar, eleven on the second bead, and so on, and fifteen on the last bead of that bar. This fifteen is now transformed by taking away the original nine-bar and six-bar and replacing them with a ten-bar and a five-bar. We thus have a ten and five units. We go on in this way and the result is formed of tens plus some number of units inferior to ten. The children eventually make these calculations very quickly without counting the single beads, and in doing so they observe the continual formation of tens.

Young Children—Advanced Work

If we consider multiplication by a number of two or three figures, we see that the arithmetical operation becomes an activity which may be carried out by a group of children or even by one child alone. Adults who watch them at work are often heard to say: ‘I had never thought of this relativity of values between the multiplicand and the multiplier’. In fact, where a unit of the multiplier receives a ten, a ten of the multiplier receives a hundred. The children know and understand this: it is the ways in which quantities work which interest them. In ordinary methods, is there not a tendency to hide these facts away as being wearisome and almost useless?

But when in secondary schools children begin the study of arithmetic and algebra, they have already lost their freshness of interest, and their habits of mind are already fixed. What interest is there in proving that $3 \times 5 = 5 \times 3$? The result is the same, and what is the use of demonstrating it? But a Montessori child of six or seven understands this and can demonstrate it.
The results reached by this method are pre¬
cocious—not because the child's intelligence
has been forced, but on the contrary because
the line suggested by the mental disposition of
the children has been faithfully followed. Long
calculations such as the extraction of the square
root of a number of three or four figures are
carried out by children of eight—cheerfully and
intelligently. They are aware of what they are
doing and this, too, is restful.

'We should not think out a difficult method
in order to teach an easy thing.' These words of
Dr. Montessori may give us an idea of what her
methods and her materials are in both arith¬
metic and geometry.

Let us now reply to those who believe that
children remain attached to the material with
which they worked in the early stages. Actually
the detachment from this material occurs early,
it occurs spontaneously, and this new insight
remains as something gained once and for all.
Sometimes a child even forgets how the
apparatus is used and goes to
watch how one of his schoolfellows
works with it. A child of seven
who had learned by using the
material to do divisions by num¬
bers of two figures, discarded the
material, and did division by
numbers of four figures. When
one day he saw another child
using the apparatus, he said: 'How
funny! I've quite forgotten how I
did it with those beads'. This too
proves that the material serves as
a point d'appui, a spring board,
and not as a crutch to support a
weak and uncertain gait. The
child's mind proceeds to abstrac¬
tion as the result of a spontaneous
mental process. It is only by
preventing him from carrying out
a sequence of practical experi¬
ments that one binds the child
down for ever to mechanical aids.

Geometry for Small Children

As far as geometry is concerned, little children taught on the
Montessori method can recognize and name geometric forms, and are
able to observe the slightest differences in form
or size. They speak of triangles and circles and
squares as they speak of pencils or any other
common objects. Children of four and five
grade circles painted on cards, each of which is
slightly larger than the other. They set six of
these cards in a row and take pleasure in con¬
templating the effect of these beautiful circles
increasing as they go. This exercise shows that
their sight has been well trained; in fact the
object of the geometric insets and their corre¬
ponding cards is to educate the eye in the
observation of shapes—not to teach geometry.
These children do not count the sides of the
figures—they know nothing yet of sides or
angles; but they do see the figure and see it
accurately. In another exercise, the children
pass their fingers along the outline of the
wooden geometric figures. The sense of touch
is very keen in small children and they are able
to recognize these figures blindfolded.

The teaching of geometry begins at about the
January 1934

MATHEMATICS AND THE MONTESSORI METHOD

The child is already accustomed to prove for himself the equality of figures, either by eye or by testing them with the aid of the insets; and he now begins to prove it by reason. For instance, this triangle is half a square. This rectangle is half that same square. Therefore the triangle and the rectangle are equivalent. This fact of equivalence of value though not of form keenly interests the child. At six or seven the child explores the whole of the geometric material in search of equivalences; he grasps the theorem of Pythagoras and discovers others for himself. Mental work is also linked to manual work. The children use compasses and rulers; they construct geometric figures and they cut them out in order to demonstrate their theorems.

Art also springs from geometry, even in the case of children of four and five. Using metal insets they compose designs which are admirable because of their harmonious colours and forms. At about five, the children combine their forms and colours in more complicated ways and the tinting is done in water colours. Many of these designs are really little works of art.

It is impossible even to outline the entire scheme of the teaching in so brief an article, but a full explanation will be found in Dr. Montessori's two books on the teaching of arithmetic and of geometry which are now ready. In particular, her book on geometry will come as a surprise to those who are accustomed to the textbooks of ordinary secondary schools. While extending her method to more advanced work, Dr. Montessori is still working out her principle of protecting and developing the spontaneous activities of the child and of disciplining these activities. She has indeed created a new school, but we cannot call it an elementary school since it deals with studies which have hitherto been delegated to secondary schools. The Montessori method of teaching mathematics cannot be adequately described in so little space, but this article will perhaps encourage the prudent reader to give this subject the close attention it deserves.

THE "DECIBANK"

"I have found the 'Decibank' a valuable aid... especially in the teaching of subtraction."—(Extract from a letter from the Principal, Perse School for Girls, Cambridge.)

THE "MULTABLE"

"One of the best pieces of apparatus for the memorizing of multiplication and division tables... attractive, durable, compact... Every school should use it.— (Extract from a letter from the late Mrs. Mary Anderson, Mellitus Street L.C.C. School, London, W.12.)

No agents. Apparatus sent on approval.
MARSHALL WILLIAMSON AND CO., BURLEY, HANTS.
EVERY child comes into this world with a certain potentiality for growth. The lines of growth are largely, and the limits of growth perhaps absolutely, determined from the moment of conception. Yet in the case of any individual there is no certainty that the limit will ever be attained, or that the best lines of growth will be followed. There are boundaries which no nurture will enable the individual to pass, yet in the development of man growth apart from nurture would be singularly ineffective.

Learning, however, does take place through growth. There is now general agreement that devices to teach children to walk are useless and perhaps harmful. The child learns to walk through the maturing of the parts of the nervous system concerned—through growth. Through growth he comes to use his fingers to take hold of things, and to direct his vocal organs so as to produce sounds. Growth causes him to fix his attention on the speech of others, to analyse it and divine its meaning. Teaching is unnecessary. It is even conceivable that teaching might impose strain and hinder rather than promote progress.

Harmonizing Growth and Training

The question of questions for the educator of young children is how to take full advantage of the forces summed up in the word growth. Already we have some experimental evidence, and doubtless in the near future many more experiments will be undertaken with the aim of separating the part played by growth from the part played by training.

In identical twins nature has provided ideal material for such experiments. Here we have two individuals in whom the growth factors are as nearly as possible identical; if we train one and not the other, what difference is there in the long run? Consider this example. Jean and Jill are identical twins. For a period of six weeks, beginning at the age of forty-six weeks, Jean was given daily practice in climbing a little staircase of five treads. At first she required much assistance; at fifty-two weeks she climbed the staircase in twenty-six seconds. At fifty-three weeks Jill without any previous training climbed the staircase unassisted in forty-five seconds. Two weeks later, during which time she was allowed to practise, she cut her time down to ten seconds. It seems then that Jean's early practice was time wasted, for her twin beginning later and spending less time on training had surpassed her. It is indeed possible that Jean's early struggles, the days when she had to be assisted at every tread, may have built up within her a feeling of difficulty which actually put her at a disadvantage in comparison with her untrained sister.

It is true that abilities need training. Perfection does not as a rule appear suddenly simply as the culmination of a process of growth. But the time when training should be begun so that it may harmoniously supplement growth, the length of the periods of training, the intervals during which the growth processes should be left to their mysterious efforts—these all need investigation so that the work of the educator may be economically and effectively directed.

When Shall Training Begin?

Nowhere is such investigation more needed than in the realm of number. Let us return to our identical twins. Suppose that they belong to an educated family, so that their mother has often counted for them their fingers and toes, the steps as they go upstairs, perhaps the sweets she gives them or the prunes they have for dinner. Counting rhymes—one, two, buckle my shoe—have amused them. They have had many blocks to play with, have arranged them in twos and threes, quite possibly have made for themselves the thrilling discovery that the same set of blocks may be regarded either as three twos or as two threes; they have vied with one another in building high towers and through this activity have learned to count up to fifteen or twenty. They know something of the money
that mother keeps in her purse, and that a penny may be exchanged for a cake or sweets. Lately mother has taught them to play dominoes and some simple card games. She has also taught them the names of the number symbols that they have noticed on houses and tram cars. In all this teaching no set times have been observed. Days have passed in which there has been no allusion to number. The children’s interest has guided the course, and this, I think, means that it has harmonized with growth.

Now they are five years of age, and Jean goes to school. Number becomes a subject, and perhaps two periods a day are devoted to it for four or five years. She learns to make figures, and to do sums. She makes up bundles of ones and bundles of tens. She is instructed in notation. Some of the instruction she finds difficult to follow, but having had a good grounding at home she quickly realizes what she is expected to do and does it. By the time she is ten she can add, subtract, multiply and divide with speed and accuracy. She knows her tables and can do reduction sums. Her ideas of what a pound is and what a pint is are not very clear, but she knows a pound is sixteen ounces, and a pint is four gills. Her figures are neat and she can write out a bill in a systematic way. For all the hours—some thousands all told—that she has spent on arithmetic she has certainly something to show.

Meanwhile Jill has not been sent to school, and has had no formal instruction in arithmetic at all. Yet she too knows a good deal. She has gone shopping with and for her mother; she knows the different coins even better than Jean does; she is quick to see that her change is correct; she has often brought home a pint of milk or a pound of sugar; she knows that half a yard is eighteen inches, and that a bag of coal weighs a hundredweight. These facts and many more she has learned by observation, by taking part in the life of adults, by asking questions when she felt the need of fuller understanding. The mother or (in the nursery school) the teacher should encourage these activities, but should not supervise them. Mistakes in counting and mistakes in nomenclature will occur, but should not be commented on. Opportunity may, of

Understanding Precedes Training

I am not aware that any experiment on those lines has been actually tried. There is, however, a considerable amount of uncollected and unclassified evidence to show that achievement in arithmetic in later years does not depend on the amount of time devoted to it in the early years. For four years I kept records of the progress in the development of number ability and understanding in the case of a child who was not receiving instruction. From her fourth to her seventh year I tested at intervals her power of recognizing number groups, of counting the units in such groups, of finding the total sum of two groups. At first groups one, two and three were recognized; any higher group had to be counted. Counting was very inaccurate, although the number names were known in correct order. Correct counting was established at the age of four years one month, at which time groups up to six were recognized at sight. The material used was playing cards, so that the groups were constant in arrangement. The adding test was given by dealing out the cards two at a time in chance order and asking for the sum of spots. I now applied the same tests to children who had been attending a good elementary school where two periods every day were devoted to number. They approximately equalled, but they did not excel the child who had had nothing but incidental instruction.

Very considerable interest in number seems in favourable circumstances to develop about the age of four. Children of this age take pleasure in counting many things, and they often show much ingenuity in finding material suitable for their counting exercises. The mother or (in the nursery school) the teacher should encourage these activities, but should not supervise them. Mistakes in counting and mistakes in nomenclature will occur, but should not be commented on. Opportunity may, of
of course, be taken to set a correct copy. The more simply and unobtrusively this is done as part of an ordinary routine, the more will the children benefit.

Not by a sudden leap does any child arrive at the understanding of number which is necessary before any formal teaching should be given. Tests applied to considerable numbers of children have shown that mastery of the number two comes at an average age of about three, of the number three at about four, and of the number four at about five. In the Stanford version of the Binet tests, counting four pennies appears as a four year old test, while counting thirteen pennies is a six year old test.

The Developing Number Sense

Intelligent, talkative children of three and four years of age often throw valuable light on the psychology of the development of the number sense by the questions they put to a friendly adult. Consider these questions and remarks made in the presence of concrete number material. (Age 3. 3) 'Is three five?' 'Four is a lot. You can have that lot.' 'Five there'll be if I get more than five.' 'You can have twelve, and you can have eleven too.' 'You can have twelve; I have not got any five, you know.' (Age 4. 3) 'How much is three pennies? Is it ninepence?'

These indications of a child's state of mind with regard to number seem to me to be of extraordinary interest and importance. This child's mental age was in advance of her chronological age so that at four years her intelligence was more than equal to that of the average child of five, yet her attitude to number was still such that she was definitely not ripe for formal lessons. Indeed she would probably have been injured by such instruction, for she would have felt that she and her teacher were not seeing the same things in the same way, and in her ineffectual efforts to accommodate to the adult mode of thinking she might have fettered her mind to such an extent as to prevent her ever becoming a freeman of numberland.

There are certain primitive tribes of men who know one, and two, and many. The word three is connected with the Latin word trans, beyond; and the root idea may simply be 'beyond counting—a lot'. This is the stage of...
ment development that seems to be indicated by the remarks quoted above. Five can be three, because they are both a lot. A big lot includes a little lot, but it may not be possible to separate the little lot definitely from the big lot. Even after the passage of a year, the conception of many dominates that of three, so that it is still possible that three might be nine. It is no wonder that it is found difficult to teach arithmetic to people who secretly cherish such shocking ideas.

The child senses his heterodoxy in this matter, and so anxious is he to conform to our orthodoxy that it is only from children with whom one is very intimate that one can obtain such clear evidence as I have given above. At that time any formal test that I can think of might have indicated that the child understood number very well, and she might have been passed as ripe for instruction. It might have been arranged for her to spend an hour or so a day counting and figuring, and the slowness of her progress would have been set down to the difficulty of the subject and not to the immaturity of her mind. Of course her progress would not have been recognized as slow, because it would have been quite as fast as that of the other children of her age. The reason our infant classes take so long to learn so little is simply that learning has to wait upon growth.

Dangers of Early Formal Lessons

If all formal lessons in arithmetic were banished from the infants' school, achievement at age fourteen need not be less, and in the case of many individuals would certainly be more. It is no light thing to build up in a little child's mind a feeling of intense difficulty and uncertainty in respect to any subject. An attitude is established which, whatever success may attend later efforts, will possibly never be entirely changed. The child whose number sense is undeveloped naturally supposes that it is the teacher who decides what is the correct answer to a numerical question; as he himself is rarely judged right when he ventures an answer, he soon knows that the teacher is prejudiced against him. His judgment becomes warped by suspicion, resentment, and a general sense of unfairness.

There would be no danger of these misunderstandings and warped judgments if early number teaching were determined by the maturity of the child. This would mean individual work; for in a class of little children maturity with respect to this subject varies very much. The teacher should have material providing a graded pathway towards the knowledge and skill that are desired. One such pathway has been provided by Dr. Montessori. Another is found in the Holyrood arithmetic material. Such material may be used for teaching; it may also be used for testing. A child who has used the material very little may be found to be coming along the path quite satisfactorily, because of the maturing of his mind.

Dr. Montessori tells us that children of seven who have worked through the series of exercises prescribed by her will set themselves long multiplication sums as, for example, 22,364,242 × 345,234,611, and do the calculation with zest and accuracy. We are not told whether all the seven-year-olds attained this height. We may, I think, feel sure that many did not, for free choice of occupation was the rule, and some children would certainly not concentrate to this extent upon the number exercises. It would be a thousand pities if such tasks were exacted from children of seven, even if they were led to them by a sound psychological method. Children who can do this kind of thing enjoy the sense of power which they experience, and also no doubt they enjoy the pride which their teacher obviously takes in their work. But for little children it is a barren occupation, and they might be employing better the precious hours of childhood.

Number and Everyday Life

For reasons which I have tried to make plain, no formal work in arithmetic should be done during the first year of school life, and no knowledge should be professed at the end of it. At the same time counting and measuring in various ways come into the life activities of the five-year-old, and the teacher should see that the number aspect of classroom work is patent to the pupil. For practical purposes the children must be counted, arranged in groups, provided with pencils and other material, and by these means fundamental numerical principles are constantly laying siege to their minds. It is a good plan, also, to give each child a box containing
fifty buttons or other attractive counters which the children should be encouraged to count and arrange in various patterns. Mistakes made in counting do not matter at this stage. They will die out if wisely let alone. Number games should be part of the equipment of every school room: dominoes, snakes and ladders, ludo, and many card games are quite suitable. Moreover, the children readily appreciate the use of counting in connection with such activities as skipping or ball bouncing.

Even in the second year of school life not much time should be given to this subject, for processes of maturation are still going on which will make learning much more speedy and facile by and by. Especially in the case of children of slow development the teacher should be careful that nothing is done to instil into them a belief that arithmetic is a difficult subject. If ‘sums’ are taught, care should be taken not to impress any formula which may afterwards be difficult to discard. There are many adults who cannot realize six and eight directly as fourteen, but have to think ‘Six and four, ten; and four, fourteen”; or in doing subtraction they think ‘Six from five I cannot; therefore borrow one’, and so on.

Personally, I think the setting down of sums would be more easily learned at a later stage, and that during this year number work should still be subordinated to and learned in close connection with play and life activities. Using this criterion we should teach the names and values of the different coins, as well as common weights and measures. Circles, some of which are cut into halves, quarters, thirds, etc., form useful material for games and cause the children to build up unconsciously perfectly clear ideas about the nature of fractions and the ways in which one can add and subtract them.

The arithmetic taught throughout the elementary school should be determined by the needs and interests of life. We are not all going to become bank clerks or chartered accountants, and even if we were, it is quite certain that the best way to acquire the necessary skills is not to practise them during our immaturity. If we do, we run a grave risk of developing all kinds of bad habits of which we may find it impossible to rid ourselves.¹

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¹Holyrood Number Material. (Pub. Robert Gibson & Sons, Glasgow.)
More children fail in school because of difficulty with arithmetic than because of trouble with any other school subject, with the exception of reading in the early primary classes. Yet arithmetic usually gets the on's share of the time table and of home work. Teachers sweat in their efforts to make arithmetic stick—only to have to go through a complete revision the next year. Upper class teachers are seldom satisfied with the product sent up to them from below.

What are the causes of this inefficiency? Recent research indicates that they lie in 1) faulty selection of things to be taught; 2) faulty organization of the curriculum; 3) faulty preparation of the children; (4) faulty motivation, and (5) faulty application.

Arithmetic and Reality

Arithmetic, as commonly taught, lacks reality. Much of it is abstract. Much is unrelated to the child's experience. This is due partly to faulty selection of things included in the curriculum. This in turn is due to the fact that teachers and curriculum makers do muddy thinking. They mix their purposes. They are at one moment formal disciplinists, trying to train children's minds. At the next moment they are utilitarians trying to give children practical skill. Then they are traditionalists, teaching a thing because it has long been taught. Then they are vocationalists, trying to prepare all children for a variety of possible vocational pursuits. Each of these purposes seemingly justifies the inclusion of some subject matter; all gets thrown into the hopper, and out it comes in a nicely organized, quite logical, and utterly unchildlike and unreal course of study. It serves none of its purposes well, because it tries to serve too many.

The solution to this difficulty is to select one goal and steer straight toward it. Certainly, in the elementary classes, that purpose is not formal discipline. Let those who still believe in the formal discipline aim of education, in spite of experimental psychology and common-sense experience, struggle along with geometry and Latin in the secondary schools, but let that aim have no part on the elementary level. And let tradition play its part for those interested in the history of mathematics, but not for little children. Vocational aims are legitimate when a child has reached the point of determining his vocation—long tons for the coal exporter, apothecary's weight for the chemist, lumber measure for the carpenter or dealer in wood. But vocations are too numerous to make it remotely possible to prepare every child for every vocation. Vocational mathematics has no place in the elementary school.

What is left? Those phases of arithmetic which will in all probability be used by the great majority of the children. This is the sole legitimate criterion for the elementary curriculum in arithmetic.

Using this criterion of common usefulness, such topics as Troy weight drop out; so do square root, area of circles, complex fractions and fractions with unusual denominators (2, 3, 4, 5, 6, 8, 10, 12, 16, 20, 24, and 32 are the only denominators used with any frequency and several of these are none too frequent). A few topics, not commonly taught, come in—the making and reading of simple graphs, for example, and short-cut ways of estimating approximate quantities.

Considerable work has been done in the field of discovering the elements which are so widely used that they will probably be of value to almost all children; but more work needs to be done and done continually. We need to know both what arithmetic is commonly used now, and what is likely to be used as children now in school grow up. This second point calls for some prediction and therefore uncertainty. But the burden of the proof is upon the topic that asks to be included—unless it can show a strong probability of vital usefulness to a large majority of children, it should be shunted into vocational, selective, or advanced specialized courses, and flatly refused entrance to the common elementary programme.
This sort of selection is of value both because it saves time and useless effort and because it makes it possible to show the child the reality of the need for learning each topic—of which more later.

**Adjust the Curriculum to the Child**

The present arithmetic programme is organized logically, not psychologically. Only in the last few years has any effort been made to discover the relative difficulty of arithmetic topics, and to discover the stage of mental growth necessary for effective learning of each.

Common sense has told us that a kindergartener should not attempt long division and that adding numbers with sums of ten or less need not be postponed until a child is twelve years of age—a certain rough grading of the programme has, of course, taken place. But this is not enough.

A few years ago a group of school men in Illinois organized the 'Committee of Seven',¹ which undertook a careful experimental examination of this problem of organizing the arithmetic curriculum. Thousands of children, in three hundred different cities, were given intelligence tests, and tests in arithmetic foundations—the concepts and arithmetical ability needed as a basis for whatever topic was to be investigated. Then the children, at a number of different age and mental age levels, were taught a given topic under carefully controlled conditions for a specified length of time. Following this teaching, they were given six weeks to forget what they had learned, and were then given a ‘retention test.’

The results were illuminating. It was found that there is an optimum time for learning each arithmetic topic. To try to make a child learn to do long division, for example, before he has reached a mental age of eleven and a half, is to make him struggle, often futilely, and forget quickly what would be learned readily and retained well at the right stage of mental growth. There is little gain in postponing beyond that stage; there is steadily increasing gain by postponing until it is reached.

The data so far available show the following mental ages necessary to assure really efficient learning by most children, topic by topic.

A large amount of failure is due to attempting to teach children topics and processes in arithmetic for which they are not mentally ripe. It is as stupid as would be the forcing open of a bud in an attempt to make a flower bloom early—and as unnecessary and harmful. A simple reorganization of the arithmetic programme to see that each child undertakes those things, and only those things, for which he is psychologically ready, is one of the most effective means of decreasing arithmetic failures.

**Arithmetic based on real Situations**

Mental maturity, however, is not the only essential for learning a new arithmetic process. There must also be specific arithmetic readiness, which is partly a matter of preparation of the child.

Preparation is of two kinds. First the child must have the basic concepts; second, he must have the prerequisite skills. For long division, for example, he must have the notion of division and the feeling as to the significance of the numbers he is dealing with; and he must have skill in the use of the simple division facts (10 ÷ 2, 25 ÷ 5, 63 ÷ 9, etc.), skill in simple multiplication, and in subtraction—elemental skills definitely used in the more complicated process of long division. This point seems too obvious to deserve stress. But the Committee of Seven found that teachers generally give only lip service to it. Children are plunged into a process after exposure to the prerequisite skills, but without proving themselves, individually, to have mastered them.

And a distressing proportion of children have not the basic concepts. The Committee found, for instance, that children sometimes went through an entire course in fractions without a real

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¹ The Committee of Seven of the Northern Illinois Conference on Supervision consists of Orville Bright, Superintendent of the Dolton (Illinois) Schools; H. O. Gillet, Principal of the University of Chicago Elementary School; J. R. Harper, Superintendent of the Wilmette (Illinois) Schools; Raymond Osborne, Principal-elect of the Francis W. Parker School; O. E. Peterson, of the Northern Illinois State Teachers' College; Howard Storm, Superintendent of the Batavia (Illinois) Schools; and Carleton Washburne, Chairman.
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Results of Experiments of Committee of Seven to Determine Best Mental Age at which to begin Study of Various Arithmetic Topics.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Minimum Effective Mental Age</th>
<th>Optimum Mental Age</th>
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<tr>
<td>Simple Multiplication (one-place multiplier, not more than four places in multiplicand)</td>
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<td>Case II Percentage—Complete</td>
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<tr>
<td>Addition and Subtraction of Fractions and Mixed Numbers with Unlike Denominators (subtraction problems involving borrowing)</td>
<td>13-10</td>
<td>Above 13-10*</td>
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* Optimum placement not determined. Age indicated is the highest for which data are available.
understanding of what they were dealing with. Asked to distinguished between two-thirds of a glass of milk, and three-quarters of a glass (not in words, but by identifying the actual objects or pictures of them), or asked to put a ring around one-third of nine marbles (the marbles being drawn for them in three groups of three each), or asked what each of the five parts of a cut pie was called, they often did not know. Yet they were expected to add, subtract, and otherwise manipulate these and far more difficult fractions. It is not unlike trying to teach children to write correct compositions in a foreign language, without giving them the meaning of the words.

Number concepts are not adequately developed by talking. The child must have experience, the more concrete and objective the better, with the realities of which the mathematical symbols are expressions. And he must have ample practice in associating the reality with the symbol till the symbol instantly and unfailingly calls up in his mind a concept of the reality. Until this is the case, the child's arithmetic is gibberish—sometimes cleverly handled, but senseless. Real things manipulated, and real situations quantitatively met: these are the only sound base on which to build arithmetic teaching.

The second phase of preparation is more commonly recognized by teachers—at least superficially. As has already been mentioned it is the necessity for a thorough grounding in prerequisite facts and skills before going on to a new process. These prerequisites are quite evident to any teacher. Let there be careful individual tests as to a child's mastery of them immediately before he undertakes a new process. If he shows weakness, let him first work off that weakness, and prove by a retest that it is overcome before he takes up his new work. Over and over again this is violated in practice. The teacher gives a general revision to the class; she tests the class and if on the average the children have a fair degree of foundation knowledge, the whole class goes on. But the individual whose mastery is lacking goes on to a hopeless task. The teacher tries to build on shifting sands. And after much labour on the part of teacher and child the edifice collapses—the foundations are insecure.

Each child must have adequate preparation before he goes on. Hence the need of individual work of some kind. Children do not reach a given degree of mental maturity at the same time; they do not all have the basic concepts at once; they do not all have mastery of the prerequisite skills. Yet to start a child on a process without this essential preparation is to doom him to inefficiency or failure.

Understanding the Need for Arithmetic

The fourth step, it will be remembered, is motivation. It is a well-known psychological law that effort is proportionate to interest. This does not mean that work has to be sugar coated, or that children may do as they please. It does mean that they must see and feel the need for what they are studying. A housewife may not enjoy sweeping the kitchen, but she wants the kitchen clean—she feels the need; and if she feels it strongly she sweeps with a will.

Children can be given this sense of need if the first criterion has been met—if the programme is based on genuine direct usefulness to the child, present or future. (Present when possible, but otherwise future. Only, if it is a future use, the child must be able to envisage clearly that future demand of life upon him and the necessity of meeting that demand.)

Here class work can, and often must, come in. Fortunately it does not matter seriously if a child has to postpone the detailed learning of a process for some time after he has found out the need for it and developed the basic concepts. I am not sure but that a period of gestation—such as suggested by Mary Boole—is a good thing. It is one thing for a child to understand what fractions are, and why he needs to add them; and quite another for him to be skilful in the details of the process.

A whole class, therefore, may be exposed to the need, and may develop the basic concepts, when only a few individuals are ready to go into the mathematical manipulation. As the others get ready, the earlier experiences, if vital enough, may be readily recalled, and will give the necessary motivation.

There are at least three ways of helping children feel the need for a given process. One
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—and a very effective one, rightly handled—is to have children bring examples to school from their own lives and those of their family and associates, of cases where a given process was really necessary. These concrete experiences may be discussed by the class as a whole. Children may strive together to see how they would solve the problem. The teacher may even, so far, when the children’s minds are agog or a satisfactory solution, as to show how that solution can best be reached. She need not be concerned about the fact that it is too soon for some of the children to learn the process. It is not too soon for them to see the need for it and to adumbrate the learning.

A second method, not nearly so good, is vicarious experience. Through stories, through problems based on real situations, children can be brought to see the probability of the situation occurring and the need for meeting it. Then the teacher can proceed much as if the children had brought in real experiences of their own.

The third method is simply a means of giving children experiences in which they will feel the need for arithmetic. Schools using the ‘project method’, or an ‘activities programme’, should have rich resources on which to draw for this purpose.

Projects should not be warped, however, in order to drag in the arithmetic; nor should they be artificial. But if they are adequate social and creative experiences they are almost bound to call for some work in number. This should be fully capitalized. But it is better to rely on the first or even the second method suggested than to destroy the naturalness, the fullness, or the spontaneity of a group enterprise for the sake of motivating the arithmetic. For that would make the project artificial and unreal, and thereby defeat both its direct purpose of stimulating group thinking and creative work and its secondary one of motivating the arithmetic.

Sometimes, however, a project or group activity may be organized primarily for its arithmetic values, and do the work of motivating quite successfully. For example, an understanding of profit and loss, of corporations and shares, etc., may be greatly helped by children’s organizing a corporation—a school store, or a rabbit raising company, for example—and in it meeting the sort of situation which otherwise would not be real to them until they were beyond school age.

Is there time for all this? There is not time to omit it. For it saves time in the long run. Time is lost—much time is discouragingly lost—by the attempt to drill children in the juggling of meaningless numbers to get answers for which they feel no need, and at a period of their mental growth when they cannot effectively learn the topic being ‘taught.’

Application—Solving real Problems

The final stage, after the mentally ready, well prepared, and interested child has embarked on the learning of a new process, is application. This step is very much like the step of motivation, for it is a direct outgrowth of the same kind of experiences. The child works on the process step by step (individually or in a small group), with the need kept constantly before him, and immediately applies his new found knowledge to real situations—the same ones as those which gave him his interest, or similar ones.

When the application can be real, so much the better. But it is legitimate for it to be vicarious. A child needs much practice in learning some processes and requires a large number of applications. For the moment the numbers—now meaningful to him—may have to be taken out of their life setting and directly and repeatedly manipulated until skill is acquired. But let that period of abstraction be no longer than strictly necessary, and let it be immediately followed by much tie-up with reality.

The ‘story problems’ of most textbooks are pitifully inadequate attempts to do this. They are inadequate because they do not present real situations, situations interesting and vivid to the child, situations which, in real life, would call upon the principal character of the problem to do what the child working the problem is expected to do. The Committee of Seven, in the course of its investigations, has found that realistic, child-like problems in profusion are the best training for the application of arithmetic to problem situations—far better than training in the formal analysis of problems.

As in the case of motivation, application is vivified by letting the child himself bring home and out-of-school life, problems that call for
Two Schools where Arithmetic is not a bugbear. Above: Ecole de l'Ermitage, Brussels. Below: Montessori methods in use at Acton.
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Far too rare, still, are the teachers who give their children a genuine and adequate sense of the realities back of a process, who see that each child is adequately prepared for the process, who give the children a keen interest based on a feeling of need, and who see that the process once learned is applied lavishly to the solving of real or realistic problems. When teachers do these things successfully arithmetic becomes a fascinating part of the child’s life, it ceases to consume an inordinate amount of time, and failure becomes as rare as it now is common.

The Teaching of Elementary Geometry

A. L. ATKIN

ALL beginners start with a certain experience of geometry gained in the outside world. The first task of the teacher is to consolidate their knowledge and develop it. Here the needs of all beginners are identical, whatever their more distant objective. The technical student, if he be a beginner, cannot profitably start with technical drawing. The secondary school pupil who enters prematurely on the formal study of plane geometry does not appreciate its purpose, and it is a reasonable certainty that a premature entry on this study will create a distaste for it on the part of many pupils who might otherwise have found it attractive. In the selection of subject matter for an introductory course and in the order of its treatment there is some opportunity for choice, and it seems better to convey some of the considerations that should guide the treatment rather than to mention topics seriatim. It need scarcely be added that a course of work guided by these considerations is all that can be attempted in an elementary school.

In early lessons in geometry there must be a liberal provision of practical work and practical illustrations. The drawing which accompanies this work practises the pupil in the geometrical description of material objects and serves to familiarize him with the geometrical abstractions of points, lines, angles, etc., which enter into this description: in this respect early teaching in geometry presents a close parallel to early teaching in number. This consideration must not, however, obscure the larger purpose of the work. Practical illustrations must be chosen which will direct the beginner’s attention to the fundamental facts of geometry; and practical work should present, in a form which is attractive to the pupil and in a setting which he can understand, definite problems in geometry. The geometry of the practical illustrations and the practical work must be worth abstracting. The characteristic property of a plane surface stands out by its contrast with surfaces through points on which straight lines can be drawn in the surface only in certain directions. Among these surfaces are included some, illustrated by the curved surfaces of the cone and cylinder, which can be rolled out flat; and others, illustrated by a string model of a hyperboloid, which are not so developable. On a sphere, illustrated by the geographical globe (of which use should be made in the teaching of geometry), no straight line can be drawn. Models of the commoner solids should be constructed at an early stage and may be used later for one or two problems in the determination by accurate drawing of inaccessible lines and angles, e.g., the finding of E F and the angle E A F in a regular tetrahedron A B C D, E and F being specified points in B C and A D. Skeleton models of simple rectilinear solids are useful, and may easily be constructed from strip wood; with the aid of string, they afford one means of
showing how the solids may be dissected, and the cube may be so used in mensuration to lead up to the formula for the volume of a pyramid.

Practical illustrations offer the readiest means of communicating the idea of a locus. One or two such illustrations may be provided by the suitable disposition of pupils in the classroom or playground. The kinematic (and more important) view must also be illustrated, e.g., by the path in the plane of the blackboard of a vertex of a set-square, the opposite side of which slides along a ruler in the plane of the blackboard. Effective use may be made here of pieces of strip wood or cardboard pivoted together with drawing-pins, set up or down to leave the pivot movable or to fix it. The paths considered may easily be traced out by a pencil (as in the pantograph), and illustrations should be included in which the path is other than a circle or a straight line: for example, the figure-of-8 traced out by the mid-point of a side of a quadrilateral of which the opposite side is fixed but which is otherwise free to be deformed in its own plane. The construction by drawing of suitably selected paths is a valuable geometrical exercise. Among the practical illustrations should be included the mechanical construction (with the aid of thread and drawing pins) of the ellipse. Here again the illustration may be followed by the construction of the complete path, given an arc of it and the foci used. One or two examples, including the sphere, should be given of loci in three dimensions. The extension adds interest to the loci associated with the bisection of a straight line and of an angle; and very easy illustrations are provided by the paths of the centre of a ball when it rolls along the floor of the classroom and when it rolls in contact with another ball. In connection with three-dimensional loci, means of generating the surfaces of the cone and cylinder should be illustrated.

Some practical work in the open-air, followed by the solution by scale-drawing of the problems considered, may evidently be undertaken very early in the geometry course. Later, work with the clinometer, plane-table and theodolite will provide interest, but the purpose of the work must not be lost in the use of other than simply constructed instruments, nor in such repetition of exercise as merelycultivates skill in the use of surveying instruments. So far as the study of geometry is concerned, the chief value of the work lies in the selection by the pupil of measurements which are convenient to obtain and sufficient for the solution of the problem in hand.

There must evidently be a considerable amount of drawing in any elementary course in geometry. Some of this drawing must be carried out with instruments, and the steady acquisition of skill in their control and use must be expected. Accurate drawing should, however, be restricted to occasions on which it is definitely required, and must be heavily supplemented by freehand drawing. Sketches should be made of the models which are used during early discussion of the geometrical form of the commoner solids, and with these sketches pupils should receive the first of their training in the visualization of the solid from the two-dimensional figure. The later construction of paper or cardboard models of solids will lose much of its value if pupils are deprived of the opportunity of suggesting in a freehand sketch, the form of a suitable net. The solution of a problem by accurate drawing should ordinarily be preceded by a freehand sketch from which the pupil, in seeking the solution, may visualize the situation to which the problem applies. The pupil who learns how to make serviceable freehand sketches, and how to read and to use them, acquires a skill which is of great value throughout the study of mathematics, and in after life.

The beginner in geometry should be trained in the exercise of his vision or intuition. He should be provided with the well-known practical and graphic illustrations which reveal to his eye the facts that vertically opposite angles are equal and that the three angles of a triangle together make two right angles; and practical measurement should be used as the court of appeal for their confirmation rather than used, in antecedent ignorance, as a colourless means of disclosure of the facts. Practical illustration similarly reveals the fact that the corresponding angles which a transversal makes with two parallel straight lines are equal; and the logical difficulties may await the time when the pupil will appreciate them. Considerations of symmetry should, at first, be accepted as sufficient evidence of equalities in line and angle. The
pupil's unquestioning faith in the existence of similar figures dates from the modelling activities of his infancy, and lies at the root of his ready acceptance of scale drawing as a legitimate means of solving many practical problems. The explicit statement of this faith may be evoked much earlier than it often is, provided that the difficulty resident in the idea of the ratio of two straight lines is for a time evaded by using (formal statement is not needed) the definition that two figures, which are so related that the angles of the one figure are equal to the angles of the other, and that the length of any line in the second figure is a constant multiple of the corresponding line in the first figure, are called similar. A convenient opening for an appeal to the pupil's intuition of the existence of similar figures is provided by the consideration of triangles drawn with base angles equal to those of a first triangle, on bases which are twice, three times, ... as long as the base of the first triangle: the practical exercises which follow should evidently not be restricted to triangles in which the lengths of the bases are integral multiples of the length of the base of the first triangle. An intuition of great value in solid geometry finds expression when attention is directed to the fact that a stick stands upright on a base formed by two other sticks fixed at one end of it and at right angles to it: if one of three concurrent straight lines is at right angles to each of the other two, it is at right angles to the plane which contains them, and in consequence to any other straight line drawn in this plane through the point of concurrence.

In an introductory course in geometry, the method of induction, rightly used, accelerates progress and educates the pupil in a method of great value throughout the study of mathematics. Inductive thinking is absent from the mere verification in a few particular cases of a general rule or law advanced by the teacher. The right use of the method lies in leaving the pupil with the difficulty of examining assembled data and for framing a hypothesis. If it be used, for instance, as an approach to the fact that the three angles of a triangle are together equal to two right angles, the assembly of the data, a table of values of the three angles of various triangles, should not at once be followed by an instruction to find the angle-sum of each triangle; for the instruction is tantamount to disclosure of the fact that the angle-sum is the same for all triangles. If the method be used to ascertain the relationship which obtains between the circumference of a circle and its diameter, the assembly of the data, a table of values of the circumferences and diameters of various circles, should not at once be followed by an instruction to express each circumference as a fraction of the corresponding diameter; for again, the instruction amounts to disclosure of the relationship which is sought for. The method of induction connotes thoughtful inquiry; and if, as in the examples given, inquiry be so far narrowed that the pupil can scarcely fail to advance a correct hypothesis, the work loses its title to be accounted inductive. The method is, in fact, ill used where the pupil is spared the difficulty of examining the data, or where, the way being left open to the pupil to formulate a hypothesis, a false hypothesis meets with rejection without appeal to the data. The examples given in illustration of the misuse of the method relate to facts to which there are better methods of approach than that of induction. The purposeful use of the method receives happier illustration in its disclosure of the relationship \( \pi + V = E + 2 \) in polyhedra, which provides beginners with an interesting exercise; and, at a later stage, in approaching the fact that the rectangles contained by the segments of intersecting chords of a circle are equal. In using the method of induction, it should not be absent from the teacher's mind that laws founded on induction are not irrefragable, and that, alone, induction cannot provide mathematical proof. Although this consideration should not be laboured with beginners, pupils must in due time recognize the limitations of induction.

During the oral discussion of problems, the beginner should acquire gradually and be trained to use the language of geometry with economy and with accuracy, and brief written description should occasionally accompany his solutions. So trained, he will be less likely to use this language extravagantly in formal geometry. Opportunities for easy analysis will present themselves in the earliest of exercises in scale drawing, and in other problems. Again, opportunities for deductive reasoning will frequently occur. They will arise naturally.
in oral work, chiefly in connection with numerical exercises at first. An appreciation of the value of deductive reasoning may, and should be gradually developed. There is a certain satisfaction, which a class will learn to share, in showing that the angle-sum of a triangle can be found from the properties of parallel lines; and as soon as pupils are acquainted with the fact that the locus of points in a plane which are equi-distant from two given points in this plane is the straight line which bisects at right angles the straight line which joins them, they are likely to appreciate the easy deduction which supplies the key to the construction of the circumcircle about a triangle. Present considerations provide one strong argument for the early introduction of the principle of similarity, to which the use of the pantograph provides an interesting inductive approach which is alternative to the approach suggested in an earlier paragraph. Numerical deductive exercises in which the principle is used are easy and interesting; and it may either be used in establishing the mensuration formulæ for the circle and sphere, or, so far as these formulæ are already known, be illustrated by reference to them. A knowledge of the principle enriches the significance of proportion, and, allied to a knowledge of Pythagoras’ Theorem, leads to numerical trigonometry, and so adds enormously to the range of problems (in two and three dimensions) which may be included in the mathematical course.

An entry on formal geometry may be effected as soon as pupils have, through their practical work, grown so far familiar with the commoner figures of plane geometry that they are likely to be interested in the investigation of their properties. The fundamental angle-facts of geometry will already be known. The triangle-congruence theorems will be accepted as facts derived from the consideration of measurements which are sufficient and necessary for the copying of a triangle; and it may be observed in passing that, in so deriving these facts, the case of the triangle should be contrasted with that of the quadrilateral. The theorems are not easy to use, and their earliest applications will be made chiefly during oral lessons. In selecting the written exercises which are given to consolidate the pupil’s knowledge, it should be remembered that, where the rider escapes being obvious, the pupil will ordinarily find less difficulty in writing out its solution. A large number of written exercises on these theorems may easily wear interest down, and the theorems should soon be used to establish other main theorems in the use of which the pupil is likely to find more interesting and more fruitful opportunities for the exercise of his deductive powers. In the selection of an order for these theorems there is opportunity for choice, but it is of the first importance that the theorems should be studied in their appropriate groups, and that the key proposition of each group should be emphasised. At this stage there is little to be gained from the actual writing out by the pupil of the proofs of the theorems. The facts should be learnt and used. In ordering the groups, it should be remembered that the angle-theorems of the circle and the theorems on similar triangles are among the easiest to use deductively. Their use presents, too, excellent opportunities for cultivating economy in oral and written expression.

Side by side with the formal development of plane geometry, it is possible to carry further the development of the solid geometry of the introductory course, through exercises in mensuration and numerical trigonometry, through the use with some frequency of accurate drawing, and sometimes through the use of the methods of formal geometry. The drawing of easy plans and elevations and the interpretation of them should be included as affording a valuable mathematical exercise.

As regards the general school certificate candidate, the formal systematisation of his knowledge of geometry is unlikely to reach further than that which is carried out during its revision for the examination. This revision should consist of the careful survey of each group of propositions, in stressing the key proposition of the group, and in tracing back the logical dependence of the key proposition on the theorems of congruence and the parallel postulate. The further examination of the logical structure which reveals the postulates which are ultimately necessary and sufficient for it is beyond the interest and the power of the ordinary school certificate candidate.
It may be said in conclusion that the course introductory to formal geometry often errs on the side of brevity and limitation; and that the formal course, once entered upon, is unaccompanied to the extent which it should be by exercises in three dimensions in which the methods of formal geometry are not necessarily used. The fact that an early entry on formal plane geometry and subsequent restriction, or at least substantial restriction, to its methods and its matter leave many pupils with a task which appears to be all they can achieve by the time of the school certificate examination tends, in the teaching of geometry, to check experiment by way of expansion of the syllabus, more particularly in the introductory course. There may be, nevertheless, some call for experiment of this kind: it may be found that the school certificate course can be covered more quickly and more effectively if the pupil enters on it with a wider knowledge and a maturer mind.

The matter is evidently one in which individual schools would be better justified in proceeding by way of gradual, and not drastic, change, and in careful observation of its results. It is unlikely that the future specialist in mathematics would lose by it. At the other extreme, the type of pupil whose weakness at mathematics finally leads him to offer arithmetic only at the examination, should definitely gain. For the majority of pupils, for whom the study of mathematics is one of a number of elements in their general education, mathematics should lose none of its cultural value. They are not less likely to appreciate the methods of geometry from having vivid experience of their power as well as formal practice in their use; and the wider knowledge which they should acquire will help them in an understanding of some at least of the physical problems of the world in which they live, if these problems should attract the interest of their maturer years.

Algebra and General Education
CLEMENT V. DURELL

Teachers are not free agents. There is a syllabus to which they must work, which specifies the ground to be covered in the term and the methods to be employed in standard processes, so as to secure a reasonable uniformity of practice throughout the school. None the less, the details of class-room procedure provide scope for individuality which will not be expressed effectively unless it is accompanied by a vivid appreciation of the peculiar contribution which the study of algebra can make to the mentality of the pupil.

Modern reforms in the teaching of elementary mathematics were first concerned with geometry. The movement aimed at converting a course of abstract logic, which was wholly unsuitable for immature pupils, into a branch of physics. At first the swing of the pendulum was excessive; but the experiments and experience of the last thirty years have now shown how the subject can best be brought into contact with practical needs and interests. There is still progress to be made, but the texture of the subject for school purposes is now proof against serious criticism.

The Practical Application of Algebra

As regards algebra, changes of method and outlook are more recent. In geometry, reform was effected by bringing some of the draughtsman's instruments into the class-room, whereas in algebra the tendency is to remodel the introductory course by introducing the practical formulæ of the engineer, thus illustrating the dependence of every technically trained man on mathematical knowledge and research.

The days when pupils approached algebra through a maze of abstract processes, elaborate substitutions and artificial systems of brackets have passed, at any rate in all efficient schools. The first step nowadays is to exercise the pupil to think in numbers when using letters: this is done by generalizing arithmetical processes and by associating such generalizations with everyday life. For this purpose the 'formula' is invaluable and the work has a
double aspect, namely: constructing formulae to fit groups of problems and deducing from given formulæ the solutions of special applications: that is to say, inventing and interpreting formulæ. By this method the novelty of the notation ceases to be alarming or confusing, for its uses are always associated with concrete illustrations.

This first stage has not been carried out successfully unless it has given the pupil a general view of algebraic shorthand, making him realize that by its aid the same forms of reasoning used in elementary arithmetical problems can be utilized for obtaining more general results, and that it provides a way of talking about ‘any number, whatever I like’ or ‘some number, which at present I don’t know but want to discover’.

Some drill in processes must follow, for without a certain degree of facility, no practical applications to any branch of applied mathematics are possible.

Nowadays this formal side of the work is much less than it used to be, but it is possible to argue that it is still excessive. Certain types of factors and fractions, required for examinations, are of little or no real value to the non-specialist, and there is still a greater emphasis on equations than is necessary. The treatment of problems demands special consideration: such work can be either tedious or stimulating: it depends on the choice of material and the form of its presentation. This point is made very clearly in a report by the Mathematical Association (1911): ‘A large proportion of the problems in our present text-books are of such a palpably artificial character as to render it unlikely that they could have been devised at all without a knowledge of the answer. There is an air of unreality about their data. They are, in fact, puzzles set by one who knows the answer to one who does not’.

There is no doubt that the position has improved since this was written. Some of the stock artificial examples justify their retention by providing useful training in style in a simple form. They play the part of scaffolding; but the chief interest must be directed to the building itself, and it is the teacher’s task to see that this is done.

Variety of illustration is vital: examples depending on the use or interpretation of practical formulæ, problems where printed data must be supplemented by general knowledge, problems introducing inequalities, problems which invite a graphical treatment, and so on. There is abundant material; but the best results can only be obtained by teachers who are prepared to take the trouble to make their own collections of illustrations. Practical illustrations from formulæ and problems supply a fairly trustworthy criterion of what algebraic processes must be mastered to enable progress to be made in those branches of applied mathematics which the non-specialist can profitably study.

The Use of Graphs

The other chief feature which distinguished the modern treatment of elementary algebra is the development of the use of graphs. This is a subject where great care must be exercised if there is to be no waste of time, but properly developed the graph rivals the formula in intrinsic interest, practical importance and the scope it offers for the exercise of judgment. Indeed the formula and the graph have much in common: each expresses concisely a number of facts, each supplies information in a manner which the trained mind and eye can utilize rapidly, and each in different degrees may suggest inferences which (though needing verification) go beyond the actual data employed in their construction. The formula is the more comprehensive and reliable: the graph speaks more vividly. The limits of this article make it impossible to discuss the details of a suitable graphical course, (the present writer has developed his suggestions in detail elsewhere1); but it is obvious that the work has failed in its purpose if the student has not learnt how to interpret such graphs as appear from time to time in newspapers and other publications. An example of practical importance and interest is supplied by the recent report, A Statistical Review of Fatal Road Accidents, published by the National Safety First Association (1933). Such material can often be used as a basis for problem work, as illustrated by the following example:

1 The Teaching of Elementary Algebra. Clement V. Durell. (Bell & Sons, Ltd., 1933.)
'SAFETY FIRST. The curves A, B, C in the diagram show the number of people killed of ages from 0 to 70 in a year, on the roads. The three curves refer to motorists, pedestrians, and pedal cyclists. To which does curve A refer? To which does curve B refer? State shortly in general terms the notable facts established by these curves.'

In general the average man who left school twenty-five years ago was not taught how to apply the work of the class-room to everyday life: broadly speaking the modern school-boy is being trained to do so. While undoubtedly more remains to be done in the moulding of the algebra than of the geometry school syllabus, it is fair to say that there is a unity of outlook which now treats both subjects as branches of applied mathematics rather than of analysis and logic.

Mathematics and Examinations

No useful review of the existing methods of teaching can afford to ignore the fact that school syllabuses are dominated by the requirements for obtaining certificates of various grades from one or other of the recognized Examining Boards. As long as most of the important public firms and numerous private employers demand a certificate of some standard form from applicants for positions, and vary the initial rates of pay offered, according to such concrete qualifications, secondary schools are compelled to arrange their teaching so as to secure the maximum of successes in such examinations.

Most unprejudiced observers who are acquainted with the peculiar difficulties of those who formulate and interpret the syllabus for leaving certificates and matriculation (and interpretation is far more important than formulation) agree that the chief public examinations in this country are conducted in a remarkably efficient manner: in general the papers are sensible and the marking is carried out in accordance with scientific principles, the fairness of the results being gauged by statistical tests. Also the views of experienced teachers are allowed to modify, from time to time, both the details of the syllabus and the range and choice of subjects. But valuable as this is, there can be little doubt that the existing system of general examinations has now nearly reached the limits of practical expansion and has indeed passed beyond the stage which many educationists consider useful. A scholarship examination can undoubtedly test not only knowledge but also flair, that peculiar faculty which the good teacher can help to develop but cannot originate; but qualifying examinations
which are represented by Certificate and Matriculation can only test routine knowledge. Successful preparation for pass examinations depends in the main almost as much on the teacher as on the pupil, but the vivid educational stimulus, which the personality of the first-class teacher supplies, is not and cannot be reflected at all clearly in the type of work which such examinations are designed to test. After the foundations of an elementary mathematical course have been laid, there is plenty of material available for work of genuine educational value which illustrates the uses of mathematics in everyday life, but avoids the professional technique which only the specialist need acquire.

Courses involving little manipulative skill can be devised in calculus, mechanics, statistics, navigation, relativity, etc., which will enable the student to live more intelligently after leaving school but which are unsuitable for any formal test by examination and actually lose much of their value if any attempt is made to train the pupil to solve the type of exercise which a qualifying examination would demand. Under such conditions, such courses are in general not practical politics, for unless a certificate can be produced to show what has been done, commercial considerations prevent time being devoted to an education in ideas rather than in facts.

No one will deny that there must be an examination groundwork. First and foremost a sound knowledge of practical arithmetic is essential for everybody: in addition there should be some training in the type of algebra and geometry which can be tested satisfactorily by qualifying examinations. But it will be found that rather less algebra and geometry than is at present demanded for School Certificate or Matriculation would provide sufficient equipment for the courses just suggested.

Practical Courses for the Non-Specialist

It may be of interest to give a brief account, based on practical experience, of work of this character with boys whose main school subjects are classics, history or modern languages. Their first period in the school is devoted to School Certificate work, but when this ground (which includes, of course, the use of logarithms) has been covered, although the certificate examination may be taken at a later date, the non-specialist mathematician is allowed four periods a week (three of which are prepared) for a series of one term courses. These, though not taken in the order of enumeration, and with rare exception not all by the same boy, are as follows:

a. Practical Trigonometry. Up to the solution of triangles and the use of circular measure; but excluding compound angles.
b. Mechanics 1. The elementary principles of statics and dynamics, with experimental illustrations, with emphasis on simple machines, associated with the concepts of work, efficiency and power, leading up to the principles of energy and momentum in kinetics.
c. Mechanics 2. Revision and extension of the uses of energy and momentum; relative motion, practical problems of equilibrium, centres of gravity, etc., largely by graphical methods.
d. Mechanics 3. A more extensive use of graphical methods, applied to frameworks, etc.: the principles of circular motion and allied physical ideas in connection with harmonic motion, the pendulum, etc.
e. Calculus. The ideas of gradients, maxima and minima, applications to mechanics and mensuration, but not to formal geometry, functions being restricted to those involving simple powers of $x$ and of $\frac{1}{x}$, and the direct trigonometrical functions.
f. Statistics and Probability. The course roughly follows the lines indicated in Sir Percy Nunn's Exercises in Algebra.
g. Relativity. This is mainly limited to the restricted theory, and although numerous elementary examples are worked, none demand any high degree of manipulative skill.
h. Navigation. The work is confined to the solution of practical problems, data for which are obtained from the Nautical Almanac, and is associated with some practical astronomy.
i. The History of Mathematics. This is the only course which does not lend itself at all easily to numerical work.
j. Elementary Economics. This course is still very much in the experimental stage: its association with mathematics is naturally weaker than the other courses, but it is one of the courses which boys are found to be most anxious to take.

This scheme of non-specialist work has been in operation for the last twelve years. Most non-specialist mathematicians take six of these one-term courses. A common selection would be: Trigonometry, Mechanics 1, and Mechanics 2, Calculus, Statistics and Economics; but there
have been a few boys who have taken them all. From time to time other courses have been tried, but the above list contains those which have survived experiment. The fundamental principle in every course is that no high degree of manipulative skill or extensive knowledge of the technique of mathematical operations is required. As would be expected, it has been found that the value and interest of a course depends largely on the contact established with the problems of everyday life.

General papers are set at the end of each term, but the success of the various courses is not really tested by this procedure, because the character of the treatment is concerned with the development of ideas rather than with drill in processes. During each course much numerical work is done, but it is designed to elucidate principles rather than to give facility in the working of exercises. The absence of continual revision in such working naturally implies that many boys obtain low marks on a composite paper set on the various courses that have been taken; but according to the theory on which the courses are constructed, that is comparatively unimportant, if, as appears to be the case, some grasp of the uses of mathematical principles and practice in everyday life is retained. The extent to which such courses can be introduced depends on the age at which a boy leaves school and on the age at which School Certificate standard is reached. There are comparatively few schools where it is possible to include courses of this character which, in their essence, pay no regard to examination tests. This is undoubtedly regrettable, because work of this type, for those who may be called amateur mathematicians, provides a finer opportunity for educational development than a course whose form is hampered by the necessity of developing sufficient technique for examination requirements, of little value in itself for the amateur, though essential for the professional.

As has been said above, the tension caused by the present system of public school examinations in this country has now increased beyond the stage of what is useful or even safe. The need is urgent for some method of introducing a greater element of elasticity into the grading of qualifications of pupils on leaving school. The difficulties are great; but should not be insurmountable. Many schools will always continue to choose the avenue of public examination; but it might be possible to devise a system of certificates of subjects studied by boys at particular schools which have submitted themselves to special inspection.

There are at the present time some schools which offer special syllabuses for their certificate examinations and thus secure a greater latitude in their selection of material; but this falls far short of what is desired by those who hold that courses which are formed to secure the greatest educational value do not lend themselves to examination tests, and that the existence of an examination, however skilfully devised it may be, has an injurious influence on the treatment of the subject. Certificates of subjects studied would naturally be combined with examination certificates for other subjects. At first, no doubt, such ‘course-certificates’ could only be issued authoritatively in a comparatively small number of schools, because, in order that they should carry weight, it would be essential to exercise a special vigilance which would be impracticable on a large scale until adequate machinery had been devised.

At present, most Headmasters are compelled to devote all available time to subjects which have an examination value, and to organize the teaching to suit examination requirements. But if a system of ‘course-certificates’ could be evolved which would be recognized by employers in combination with examination certificates, there would be little reluctance to assign periods in the time-table to work of this character. It should not be beyond the powers of the Board of Education or the various bodies which conduct the principal examinations to devise the necessary machinery for making a system of this nature effective; and it is hard to overestimate the benefits which would accrue to general education, not only in relation to mathematics, but in relation to all subjects which suffer from the present tendency towards a narrowing specialization.
Living Mathematics and Sixth Forms

R. H. COOMBE

It is customary in the ordinary secondary school to demand as a condition of admission that the parent shall sign an agreement that his son shall remain at school until the age of sixteen, that is to the age at which the School Certificate is taken. A certain number of boys normally remain at school with a view to taking the Higher Certificate and University Scholarships. In many schools the remainder tend to leave after passing the School Certificate. Such boys miss what is perhaps the most valuable part of their school careers. For it is in the freedom to follow special aptitudes which well organized Sixth Forms give that the boy really begins to find himself. Even poor parents are willing to allow their son to remain at school for a longer period if they feel that the boy will benefit thereby. The problem is to decide on a suitable course for such boys under normal staffing conditions. In a school of ordinary size, of say 300 to 350, a completely separated special Sixth Form course is impossible. It is possible, however, so to organize the Higher Certificate Course that such boys can fit into the work of the first year. Indeed, when this is done, a number of boys who only intended to remain for one year find the more liberal work of the Sixth Form so interesting that they decide to stay on and read for the Higher Certificate.

In this school the one year Sixth Former, who will eventually go into the industrial or commercial world, studies one or two modern languages and economics as essential subjects, the usual Social Studies course taken by all members of the Sixth, with a choice of English, modern history and science (all these with the Higher Certificate candidates), together with a course of realistic mathematics which is worked in close conjunction with the economics course.

These boys have had already a good grounding in the various mathematical processes, but the main stress has been laid on accuracy and the ability to work specific examples. In the special course, an attempt is made to link up mathematics and life. Each section of the subject is taken in three stages: (1) introductory talk by the master, (2) class debates on all points, (3) working of examples. Take Stocks and Shares, for instance. The opening lesson would be devoted to a history of the Stock Exchange, an account of the securities dealt in—Funds, etc. Notes would be taken and various ideas sketched in and left for investigation before the next lesson, such as the various classes of shares, the brokers and jobbers, how prices are influenced by Stock Exchange booms, the Stock Exchange and the public. Partnerships, Insurances, the Shipping World, the Exchange of Moneys, the Banks, etc., are dealt with in a similar manner. The boys consult reference books and the daily papers.

By the next lesson a good deal of information has been gained by the boys themselves and this is entered into their self-made text books. One side of the page is used only, the other being left for further points and news, and the results of the debates which follow.

These debates, in addition to thrashing out various questions, teach the boys to express their own opinions and develop that broad-mindedness which is so essential in the world to-day. Not until all the points have been debated is calculation resorted to, so that when the working of examples begins the boys have obtained so much information on the subject that the examples become living mathematics—mathematics which the world of commerce and industry is using day by day. In this way the boys are being prepared to start their careers, not merely with a theoretical knowledge of mathematical processes, but with some knowledge of their practical application to the working of the commercial and industrial world.

Mr. Coombe describes how a senior mathematics course can be related to commerce and industry and so serve as a valuable preparation for a career in either.
EVERY branch of thought or activity has, I suppose, some connection with every other branch. Any two branches must have at least this relation—that we can, so to speak, wed them in thought by simply thinking of them together. Perhaps that is the only kind of relation one branch of knowledge or experience ever has with another, but some branches seem more fundamentally akin, having, as it were, a blood relationship. That the relations between music and mathematics are of this essential kind has been maintained by philosophers and others from very early times. The philosophers of Greece regarded music and mathematics as first cousins, if not as twin arts or sciences, derived ultimately from a common source. In the schools of the Roman Empires and throughout the Middle Ages the curriculum for older pupils consisted almost solely of four branches of mathematics—arithmetic, geometry, astronomy, and music. No doubt what was studied under the name 'music' in the mediaeval curriculum had little connection with music as an art, but the fact that for centuries music was looked upon as a branch of mathematics at least calls for explanation. Nor was the belief that music and mathematics are fundamentally related confined to those early days when the logic of relationship was in many respects cruder than it is now, and when men allowed imagination to play a large part in their speculations. As late as the middle of the nineteenth century we find that aesthetic pure mathematician, J. J. Sylvester, writing: 'May not Music be described as the Mathematic of Sense, Mathematic as the Music of Reason; the soul of each the same! Thus the musician feels Mathematics, the mathematician thinks Music.'

There are people, some of them mathematicians, who are irritated by the vagueness of statements such as Sylvester's. There are, however, two causes of vagueness in speech or writing, and while one of those causes is a weakness in the thinker, the other may show strength. A man may write in difficult sentences because he is a poor thinker, or because the subject is elusive and profound; or both causes may combine! Sylvester's dictum, in any case, is crystal-clear in comparison with the mystical utterances of some people on this subject. In the writings of mathematicians and others about the relations between music and mathematics there is a queer mixture of science, metaphysics, and mysticism. Some of the utterances are demonstrably confused and misleading; others are difficult to understand, but may contain a good deal of the elusive truth about the matter.

Leaving on one side for the moment consideration of the general question of the real or imaginary affinity of music and mathematics, let us first recognize the interesting fact that many famous mathematicians have shown an interest in one or more of the aspects of music. Sylvester is one of a long line of mathematicians who found music, or the theory of musical sounds (a different thing), of absorbing interest. One of the earliest mathematicians, Pythagoras, whose name recalls right-angled triangles (and very little else, perhaps) to most people, speculated widely, and often wildly, about music. He made the remarkable discovery, now a simple proposition in elementary physics, that sound was due to vibrations in bodies, and that the vibrations corresponding to notes forming the common consonant intervals are in simple ratios formed by the numbers 1, 2, 3, 4. Not content with this legitimate physics, Pythagoras gave fuller rein to his imagination and maintained that as the planets are in motion they must emit musical sounds, though we do not hear this music of the spheres because we are
like men in a smith's forge, who cease to be aware of a sound which they constantly hear and are never in a position to contrast with silence. Euclid is supposed to have written two treatises on music. Later famous mathematicians who wrote on music were: Cardano, Kepler, Wallis, Descartes, Mersenne, Huygens, D'Alembert, and Euler. As contributions to musical aesthetic many of these writings are no doubt of small value; but the same may be said of some books on music by professional musicians. Many of the mathematicians approached the subject from a standpoint natural to people who are impressed by the Pythagorean discovery of simple ratios. They asked themselves why simple ratios should produce pleasing intervals, a question that seems less important in these days when dissonances are considered by many people as pleasing as consonances. They then proceeded to seek a mathematical or metaphysical basis for what happened to be, at the time they wrote, the accepted laws of musical composition. Euler puts forward the naive theory that consonances are pleasing because we are naturally pleased with everything in which we can detect a certain amount of perfection and order, and a combination of tones will please us when we discover the law and order of their arrangement. Then in proportion as the law is discovered more freely (which he thinks it may be when the ratios are simple) the mind will have more pleasure. It is queer that Euler should not see that, as experience, consonance has nothing to do with numbers.

The futility of attempting to relate the rules of composition prevalent at a particular time to 'fundamental laws of nature' was pointed out by Helmholtz. "The system of scales and modes", he writes, 'and all the network of harmony founded thereon, do not seem to rest on any immutable laws of nature. They are due to aesthetic principles which are constantly subject to change, according to the progressive development of knowledge and taste.' We may ask in what sense laws of nature are immutable and we may wonder how aesthetic principles can be said to develop progressively if there is nothing fixed in the nature of the universe by which to measure the progress. But without an excursion into metaphysics we can recognize the significance of the fact that physics is at best only one datum of musical aesthetics. And we can recognize a good deal of truth—with, I believe, some error—in the statement by another nineteenth century writer that 'musical beauty has nothing to do with mathematics' and that 'though mathematical doctrine furnishes an indispensable key to the study of the physic of music, its part in musical composition must not be unduly magnified.'

Of music, Hanslick says 'There is no art the forms of which wear out so soon and so extensively as music'. Now, I suppose, nothing could be more permanent, less subject to the vagaries of fashion, than mathematics, and so it seems that attempts to discover laws of musical aesthetic which are based upon and co-eternal with laws of physical nature expressible in mathematical terms are foredoomed to failure. But I believe it possible that while attempts which have been made by mathematicians and others to construct a musical aesthetic on a mathematico-physical basis are to a large extent idle, a more profound, if less 'scientific' study of the matter may lead us to recognize some really fundamental affinities between mathematics and music.

The two activities—mathematics and music—have several rather highly abstract qualities in common. Both are in a peculiar sense independent of the ordinary physical world: mathematics is the most abstract of the sciences, and in a certain sense music is the most abstract of the arts. The experience of beauty in pure mathematics is based upon the pleasure given by a significant set of relations between abstractions, rather than upon any bearing the theme may have upon the world of things outside mathematics. So also, the beauty of music is generated by the significant relations between pitches of notes in rhythmic succession; it is a beauty that springs from the internal structure of the music and has nothing to do with any

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1 Article, Pythgoras, Encyc. Brit.
3 Helmholtz: Sensations of Tone. Quoted in Pole's Philosophy.
4 E. Hanslick: The Beautiful in Music. 1891.
January 1934

MUSIC AND MATHEMATICS

non-musical significance the sounds may have. The question, How can a mere pattern, a musical or mathematical theme, be significant? cannot, so far as I can discover, be answered. Of what is it significant? Or, what does it signify? We may speculate, on the lines of Plato, that it signifies some fundamental quality of the world. We may, if we think on these lines, speak, as some have done, of the world as embodied music. Or, with Schopenhauer, we may regard music as deriving its significance from that 'will' which is even more fundamental than the Platonic Ideas. We may say that a theme is significant because its form is in agreement with the élan vital of Bergsen, or, if you are prepared to elevate Bernard Shaw to the rank of philosopher, his Life Force or Urge. But all these forms of words really get us no further than the plain fact that the forms generated by suitably related elements are in a certain sense 'recognized' or welcomed by us. The elements of music are pitches in a certain serial order, between any two of which is an indefinable but quite definite relation which we call the 'interval'. The mathematical theory of 'distance' is closely analogous to the musical theory of 'intervals'. The analogy of pitch with spatial position is not due, as one musical writer suggests, to the mere fact that we happen to use a geometrical device in staff notation. It is due to the fact that pitches have a definite linear order. Further, the 'volume', or pervasiveness, of notes, a quality that gets smaller as the pitch gets higher, has an analogy to space that has nothing to do with mere accident, such as the spatial arrangement of note-symbols on a stave. Whatever may be the exact nature of the process of appreciating music it certainly is due to the perception of relational patterns which have no necessary significance other than the intrinsic significance that patterns appear to have. Apart from harmony, which introduces relations of another kind, we find in melody a complex process of perceiving—or 'feeling'—if you prefer the word—relations. Given two successive notes, say C and G, we get an experience called 'hearing a fifth' from the relation between the two notes. But G following C is not, as experi-

ence, the same as G following another note; and having heard the G we retrospectively hear the C coloured by its succeeding note. So that the terms themselves get peculiar qualities from the relation in which they stand to one another. What applied to two notes, applies also, mutatis mutandis, to two consecutive melodic phrases, or two consecutive significant groups of phrases, or even to two movements of a long work. There are also relations between rhythmic sections of a melody. And by the synthesis of successively heard notes we get the dynamic quality of musical experience, much as a succession of pictures in a cinematograph produces, owing to sensory persistence, the experience of motion. In all musical experience the synthesis of relations between elements which by themselves, like points, have no quality but position in a series, is going on. It seems clear that the pleasure derivable from such a process of relational synthesis is closely analogous to the pleasure derivable from the appreciation of propositions and groups of inter-related propositions in mathematics.

These relations between music and mathematics or, we should perhaps more correctly say, between musical and mathematical experience, make it not unlikely that mathematicians should find music a congenial art. Several well-known mathematicians—for example, Maupertius, Herschel, Bolyai, Grassmann, Lagrange, Dirichlet, and Poincaré—have been devoted lovers of music, some of them expert performers, and a few of them composers. But there have also been many mathematicians with no taste for music, and it is impossible to believe of large numbers of non-mathematical musicians that their lack of ability in mathematics is merely due to neglect of the subject in their education. There has been no systematic study, to my knowledge, of the correlation between musical and mathematical ability. Before we can form tolerably clear ideas of the relation between musical and mathematical experience, we shall have to know a great deal more than we do of the psychology of mathematical thinking. That is at present a comparatively unexplored field. It is somewhat surprising that so much

5 Eric Blom: The Limitations of Music. 1928.
7 These particulars are from Mathematicians and Music, article by R. C. Archibald in the American Mathematical Monthly, Vol. XXXI. 1924.
headway should have been made recently in the study of the philosophical bases of mathematics while the psychology of mathematical thinking should still be so little understood.

Can we draw any pedagogical moral from the known or probable relations between mathematics and music? There are one or two conclusions to which a cursory survey of the matter leads us. First, we must discount claims sometimes made by musicians to the effect that the study of music produces improvement in mental activities of a non-musical kind. Such claims are often based on that erroneous doctrine of faculties which psychologists are always turning out of their front door—only to find later, curiously, that it has re-entered by the back. Claims that musical or eurythmic activities produce an improvement in mathematical ability can but be tested by experiment. We do not know enough about either mathematical thinking or musical experience to predict whether such transfer of training is possible. Secondly, it seems probable, from the history of the writings of mathematicians on musical aesthetic, that a study of the physics of sound is little, if any, help towards the true appreciation of music. Thirdly—and I incline to think this is the most important moral—it is clear from such utterances as that quoted from Sylvester that mathematicians experience a definite aesthetic pleasure in their subject. They may or may not be right in supposing that that pleasure is similar to the pleasures of music. Let teachers of mathematics, however, regard their time as largely wasted if their pupils get no aesthetic pleasure from the subject. Appreciation of music means, among other things, sharing some of the feelings of the composer; appreciation of science means, among other things, having some of the elation of an original inquirer. Why, then, should we forget that the study of mathematics is an adventure in which our youngest pupils can, according to their powers, share the experiences, which we have seen to be often aesthetic, of the great mathematical adventurers?

**Freedom and Discipline in Education—Part I**

**This month's article for Parents**

**MARGARET LOWENFELD**

EDUCATION is in these days very much concerned with the concepts of freedom and discipline and the controversies concerning them. These notes arise not out of the experience of teaching children but out of conclusions suggested by the careful study of children who have failed to be educable. With these children in mind, I wish to suggest that before we can usefully discuss freedom or discipline in education, we should attempt to arrive at some agreement as to the fundamental concepts underlying these terms.

What is Freedom?

Freedom may perhaps be defined as a set of circumstances in which an individual is at liberty to carry out what he wishes to do. It implies that the surrounding world and the self approve that which the 'I' desires to accomplish, also that the 'I' itself desires to be and is neither let nor hindered within itself. In a state of freedom the 'I' concerned, whether child or adult, would feel that what he wished to do was good, that he was able to carry it out, and that in doing so he would meet with at least the tacit approval of his environment.

Freedom, therefore, taken in this sense, is the possibility of carrying out anything you wish to do with the approval of your environment. Recently this has been held up as a goal in itself for the education of children.

In the older view of education, the child's mind was looked upon more or less as a blank page whereon could be written by force of repetition and example those facts held to be desirable by the educators. Very little attention was, or is now, paid by those holding modifications of this view to the question of the motives which should actuate a child in being responsive to this attempt, or to the relation between this
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process and the child’s own fundamental character. Instead, the results of failure to comply with the plan were so much more unpleasant than the effort of compliance that the majority of children would decide to fall in with the plan and to do their best to be instructed by it.

Now whatever the merits or demerits of this system, into which I do not for the moment wish to enter, it is at any rate clear that there is here no connection with the concept of freedom. For good or for ill, such a form of education is predetermined by the educators, and into it the child must fit as best it may. The question as to what the child himself wishes to do is not raised at all in a system of this kind. Instead it is argued that since a child has no knowledge it cannot tell whether it wishes to know certain facts or not until it has made the experiment. The evident enjoyment of many children when taught in this way seems to show the soundness of the reasoning adopted.

The same applies to earlier nursery education. It seems so clear that a child is happier and more comfortable if it has become able to control itself and its own wishes in conformity with the wishes of other people, and has acquired those manners which make daily life among adults and children so much easier.

On the face of it, both contentions seem reasonable. It is only later experience of these children that makes me pause to reconsider the nature of the growth of a young child. Has a child, apart from the desire to play, any real desires at all, and if it were given full freedom to carry these out, what would be likely to happen? Would knowledge result, and if so, what kind of knowledge?

No knowledge which is real can be acquired by any human being unless he is driven by a desire to possess it. Apart from mere retention in the brain of minute particles of fact, knowledge, if it is to educate the mind at all, must marry intimately with the whole substance of the mind. For this to be possible, the mind itself must meet such knowledge with an inherent desire for its incorporation.

The idea of freedom in education is based upon the conception that children have strong desires of their own, desires which can be side-tracked but not annihilated, and which, if given freedom, will lead them to the goal we desire for them.

Every infant is born into the world with equipment for the gaining of sensory experience, and with certain dominant desires. He desires to understand his environment, to have power over it and over his body, and to gain pleasurable experience. In health, these desires are strong and give him little rest. He has also a great delight in activity, in noise and shouting and in the funny side of life. By nature he has no respect whatever for other people’s property (though much for his own) or for the persons or rights of other human beings. On the other hand a healthy child has a large fund of generosity and good humour, and a willingness to forget and start again. Power of concentration is a marked characteristic of healthy childhood, and the ability to repeat again and again an effort which has met with failure. If a child desires to know, and is left undiscouraged with enough material to work upon, he will go on undaunted working at a problem until he finds out what he wants to know.

Every child wants to know about himself—what he is and where he came from, about the world in which he finds himself—what is clay and what is water, where wood comes from and how it differs from iron, how trains go and what sort of person is an engine driver, what would happen if he killed the cat and if mice come alive again. He wishes to be strong and run and climb like Tom, to drive a car and take photos like Daddy, to cook and sew like Mummy. But he lacks equipment for his experiments (and this equipment is the same as that needed by the adult worker in any sphere into which the element of learning enters—that is to say, tools and the material on which to employ them), direction and constructive criticism. The newer educator believes that a
healthy child when supplied with equipment sets out to discover for himself exactly those things which we want him to learn.

What then is the advantage of such a system? It is vastly more difficult to put into operation than the earlier system, and if the results are the same, why go through all that turmoil and discomfort?

The answer is that a child who has taught himself has in so doing become a free man. He has, from desire and not from compulsion, struggled with and mastered his interior difficulties—his laziness, untidiness and misty-mindedness—and in the accomplishment of his own ends he has furthermore gained personal independence. Such a child may know less of actual facts than the child educated by the earlier method, but for him the gates of further knowledge stand permanently ajar: he has learned how to put his weight upon them, and where and how the force can be applied that will wrench them open.

What then of discipline?
(Dr. Lowenfeld discusses this question in our February number.)

International Notes

To Members of the New Education Fellowship

Headquarters sends warm New Year greetings to all members of the Fellowship. We thank them for their continued and self-sacrificing support. We wish also to add a word of gratitude to those who by special gifts, either of time, thought or money, have so materially aided the work at Tavistock Square. The loyalty, co-operation and encouragement shown in letter, word and action by members from all over the world, make us proud of our movement and prove once again the deep and vital spirit that is the life of the Fellowship.

News has just reached us that new Sections in Mysore, India, and in Bolivia are about to be formed. Thus the ends of the earth join hands at the Fellowship's Headquarters as the Old Year closes. May this be a happy augury for the New Year!

World Fellow Teas

At Headquarters, 29 Tavistock Square, London, W.C. 1, members and their friends and enquirers meet for tea every Friday, at 5 p.m. Teas will commence again after the holidays on 12th January.

South-Western Federation

The first meeting of the General Council of the new South-Western Federation of the N.E.F. was held at Bristol on 11th November, Dr. John Murray, Principal of Exeter University, presiding. A report of the activities for the first half-year was read, and plans made for increasing these next year. The subscription to the Federation was fixed at 5s. (member) and 2s. 6d. and 1s. (associate), payable to Miss J. Cruttwell, Oakfield, Frome (Secretary and Treasurer).

The English Association of New Schools

The At Home given at the Royal Academy of Music, on 18th November, by the New Education Fellowship and its English Association of New Schools, to celebrate the first anniversary of the Association's existence, differed notably from most educational functions. The meeting was pre-eminently a social one; the two dozen hosts and hostesses, among whom we were glad to see such pioneers of the New Education as Lady Balfour and the Bertram Hawkers, seemed to spend most of their time in bringing together guests who wished to be introduced. It was surprising to find how many well-known people had a personal interest, either as parents or friends, in the new schools and their new association.

Some of the 450 guests had already overflowed into the gallery before Lord Allen, Chairman of the E.A.N.S., began to speak. He described the Association as a research body, formed for the common study of the practical problems of the new education. Its purpose was not to single out these schools but to bring them into closer contact with one another and with the educational life of this and other countries. This aim was further emphasized by the choice of speakers. After Mr. Rawson had explained how the Fellowship had been led to form the Association, and Mr. Harrison had read out the names of its first thirty members, the platform was left to the three main speakers of the evening, Mr. Siepmann, the Director of Talks of the B.B.C., Mr. S. H. Wood, the head of the Office of Special Enquiries and Reports of the Board of Education, and Dr. Kurt Hahn, representing that significant body of private boarding schools on the Continent, which derive a part of their original inspiration from the new schools of England.

Mr. Siepmann described the work of the Talks branch of the B.B.C., and insisted upon the revolution implied in the fact that the public were now, for the first time in history, listening to opinions not their own expressed by first-rate minds. He called upon his audience to exercise constant vigilance so that the B.B.C. might be strong enough to resist any effort at exploitation and maintain its present standard of integrity and impartiality.

Mr. Wood then referred to the priceless gift of leisure which we were now offered under the name of unemployment and placed on record his hope that our schools would one day become not little walled-in centres of instruction for children, but institutions which society had of necessity thrown open for its own delectation and delight.
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Dr. Hahn spoke of his last fourteen years as headmaster of Schloss Salem, one of the famous private schools in Germany. He described the ideals of which it had been founded by Prince Max of Hohenlohe-Langenburg after the War, how these ideals had been brought to life by the present headmaster, Dr. Prince Max of Hohenlohe-Langenburg. To lead the young people to become a social person, and train the man of action in the imaginative faculties. It was eleven o'clock before the speeches ended. Tany guests stayed on to talk and to congratulate Miss Mysore, Secretary of the Association, to whose retiring exertions the success of the evening was so largely due.

Mysore Section of the N.E.F.

With the co-operation of Prof. A. R. Wadia, a section of the New Education Fellowship has been founded at Mysore. Dr. T. N. Jacob, Professor of Education at the University, Mysore, is President and Mr. D. S. Gordan, Assistant Professor of Education, is Secretary.

Other Points of Interest

Parents and Children

Parents and Children, till recently a supplement to The New Era, of which some of the articles appeared in The New Era, will in future be published separately. It is now to be the official organ of The Home and School Council of Great Britain, but it will still be published by The New Era, and the series of articles planned by the special consultative committee and dealing with various problems of childhood will appear in it each month. A special article for Parents will, however, be published each month in The New Era. The subscription to Parents and Children has been reduced to 2s. 6d. a year, post-free. All inquiries should be addressed to 29 Tavistock Square.

S.C.R. Educational Tour in Russia

The Society for Cultural Relations Between the Peoples of the British Commonwealth and the U.S.S.R. is once again organizing a tour for educationalists to the U.S.S.R. in the Easter Vacation when school and university life is in full swing. All types of educational institutions will be visited and facilities for meeting Russian educationalists will be provided. The tour will last about 25 days and the cost will not exceed £35. Further particulars may be obtained from the Secretary, the S.C.R., 1 Montague Street, London, W.C.1.

Modern Language Association

The Modern Language Association has begun an earnest attempt to stimulate interest in Italian and a most successful public meeting was held at University College, London, on 11th November. Lord Rennell opened the meeting and Professor Bullough, in his speech, said that he hoped the meeting would bring together three classes of people—those who are actively interested in Italian, Head Masters, and Head Mistresses, and Parents. The meeting made it clear that considerable enthusiasm exists for Italian in this country and a Committee to direct the encouragement of a study of Italian will be formed from a nucleus of those present at the meeting. Those interested are asked to communicate with the Hon. Secretary of the Modern Language Association, 5 Stone Buildings, Lincoln’s Inn, London, W.C.2.

Nursery School Association of Great Britain

The Winter Conference of the Nursery School Association is being held in connection with the Conference of Educational Associations at University College, Gower Street, W.C.1, on Friday, 5th January, 1934. At 11 a.m. on 5th January, Dr. E. Graham Howe will lecture on ‘The Meaning of Mental Health’. Miss Jebb will take the chair. This will be an open meeting to which all will be welcome. The Conference promises some interesting discussions. At the members’ meeting (5th January, 2 p.m. to 4 p.m.), the report on Infant and Nursery Schools will be considered. Copies of this may be obtained from H.M. Stationery Office, Adastral House, Kingsway, W.C.2, price 2s. 6d.

On the evening of 5th January (5 p.m. to 6 p.m.) a draft report, prepared by members of the Nursery School Association Executive Committee, on ‘The Nursery School Probationer’ will be discussed. Copies of the report may be obtained from the Secretary of the Nursery School Association, and it is hoped that members attending this meeting will be ready with their suggestions, as a pamphlet on the Nursery School Probationer is to be published in the New Year.

Those who have opportunities of viewing Nursery Schools in or near London, will be interested in the Nursery School at Croydon which was opened in the autumn. This is now running smoothly and successfully, with its full complement of 40 children and the inevitable waiting list. Some of the more ordinary difficulties experienced in opening a new school were avoided in this case quite successfully. For example, only 10 children were admitted at the opening of the school. One or two were taken in during succeeding days, and a further batch of 10 at the beginning of each following week until the number was complete. In this way some of the children had had opportunities for becoming familiar with the staff and their surroundings before newcomers arrived, and the difficulties so often created by setting a large number of children in a quite unfamiliar environment were diminished.

An interesting item in the equipment is to be seen in the beds that have been made at an Unemployed Men’s Occupational Centre. These consist of folding wooden frames with a cover made from strips of disused rubber motor-tyres closely interwoven. The rubber is easily cleaned and probably extremely comfortable. What its wearing properties are, experience will have to show. Most attractive play material has also been produced by the same Occupational Centre.

The success with which this school has begun is an encouraging sign to all who are devoting their energies to the establishment of new Nursery Schools.
Book Reviews

A New World in the Making. Edited by Wyatt Rawson. (New Education Fellowship, 7/6 or 8/- post free.)

A Swiss Opinion.

This book is instructive from many points of view. It shows first of all in a striking way the extraordinary interest aroused to-day by the problems of education. This was not the case fifty years ago. Secondly, it proves that this interest in education is to be found in every country and in all continents: in North and South America, in Africa, Australia, Japan, China, India, as well as among the diverse nations of Europe. Thirdly, the book is not only concerned with instruction: it deals rather with education as a whole. The entire being must be affected by education—not merely intelligence or reason or memory. Education is looked upon as an attempt to arouse the whole child by an appeal not only to the mind but also to the heart and will, involving responsible individual and social activity. The goal of education is in fact the formation of character.

The Nice Conference of the New Education Fellowship, of which this book is an account, left some delegates (as the book has left some readers) with the impression of a chaos of conflicting opinions without any common inspiration or common aim. Such a view is superficial. It is due largely to the fact that children differ: some are full of initiative, others are passive and easily led. The same differences can be noted among adults, among parents and teachers. But the dynamic essence of education—indeed, of its application by different types of adults to different types of children—is unique. It is the arousing of the child's spiritual, vital impulses, of his creative spontaneity, of his initiative. He must achieve unity in his inner life. His hereditary tendencies must be integrated by his own will and thus put at the service, first of society as it is and then—in the case of the élite—of the moral and social regeneration of the world. This constitutes the unity of the New Education movement which to-day has become world-wide and irresistible, and it is to this unity that A New World in the Making bears convincing and eloquent testimony. Ad. Ferrière

L'Enseignement de l'Histoire. L. Verniers. (Maurice Lamertin, 58 Rue Coudenberg, Brussels.)


The above books were discussed in the article entitled 'The Classics, History and the Complete Citizen', in the December number of The New Era.

Books Received

ARITHMETIC

Bell’s Everyday Arithmetic (Books 1-4). J. B. Thomson. (Bell & Sons.)

A Junior Arithmetic. R. C. Fawdry. (Bell & Sons.)

ALGEBRA AND GEOMETRY

New Algebra for Schools (Parts 1 and 2, and Part 3). C. V. Durell. (Bell & Sons.)

Plane Geometry, Practical and Theoretical. V. le Neve Foster. (Bell & Sons.)

Also Received

Arithmetic Material. By Svend Emborg, Ollerup, Denmark. These are self-correcting pictorial puzzles. On a separate sheet there are simple addition sums, and the answers are given on the back of the sections of the puzzle. The child places the answers face downwards and when the sums are all completed, he turns the picture face upwards. If the answers are correct, the picture will be correct also.

The ‘New Chelsea’ Series of Nursery Pictures. (Philip & Tacey, 45. 6d. Special price for schools, 35. 6d.) This is a charming series of coloured pictures suitable for classroom or nursery decoration. Parents and teachers should welcome them.
Our Contributors

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A. J. LYNCH, J.P., late head of West Green School, Tottenham, London, is now Field Secretary of the New Education Fellowship. He is author of Individual Work and the Dalton Plan, The Rise and Progress of the Dalton Plan, etc.

A. K. C. OTTAWAY, B.Sc., A.R.C.S., has, for the last five years, taught biology and other subjects at Abbotsholme School, Derbyshire, where he is Senior Master. Abbotsholme was founded in 1889 by Dr. Cecil Reddie, an educational pioneer, who originated the New School movement.

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RICHARD SEYSS-INQUART is an expert on education for neglected children. After being Professor at the Vienna State Institute for the Deaf and Dumb, he became Director of the Vienna Prison for young criminals, which he conducted on educational principles. He agitated for the reform of the Austrian Criminal Law for Juvenile Offenders, and was in 1929 to some extent successful. Since then he has been Director of the Federal Institute for Neglected Children in Vienna, which he has organized on modern lines and where he is investigating new methods of treatment for young offenders.

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Outlook Tower

Our readers will be glad to learn that the Editor, Beatrice Ensor, contributes this month’s leading article.

THOSE who question me most closely about the practice of the new education almost always begin and end with the same question—'But how much freedom are the children allowed, and how does one run a free school?'

There is of course no single and exact way of answering such questions, and this editorial must be read as a personal view rather than as a summary of the tenets of the New Education. The amount of freedom given to the child in his everyday behaviour varies enormously from school to school; but what varies even more is the quality of that freedom, which depends directly upon the personality of the Head. We may discount the brand of 'freedom' that is due to the laziness of those who have charge of the children, and who let them run wild because it is less trouble than supervising them in any way. We may discount too the kind of freedom (more often found perhaps in the home than in the school) which owes its existence to diffidence or fear, when the adult in charge is too much at sea himself, too uncertain of life's aims and values, to dare to attempt to discipline the child. The only sort of freedom that is constructive and has value as a means of education is that which is based on an understanding of the scope and limitations of man's freedom.

What is Freedom? Man cannot attain to absolute freedom. Not only is he subject, like any other creature, to natural laws, but he is a social being, and his actions, emotions and thoughts concern not only himself but other members of the group to which he belongs. If he wants consideration he must be prepared to show it. The child, like the adult, is beset with natural tyrannies. Fire burns him and a bad fall bruises him, not because he deserves burning or bruising but because such is the tyrannous nature of natural laws. Having eaten his cake, he can no longer have it: if he makes a dead set at having his own way and securing his own pleasure, he finds himself cold-shouldered by the group and bereft of the enjoyment he has set out to obtain. These are truisms and not worth setting down except for the fact that they are sometimes lost sight of by those who talk 'too big' about freedom.

Yet in spite of his very nature, the brevity of his life, the vulnerability of his body, mind and spirit, his dependence upon the goodwill of his fellows from the cradle to the grave, man is free in so far as he realizes and accepts his limitations. Grounded upon such acceptance, his creative imagination can overleap these limitations.

Modern educators set out to provide the child with 'an environment for growth'. This should mean an environment in which he can grow to freedom, in which he can learn the tyrannies of the natural world, but in which he can also learn to use for his own ends the very qualities that, ignored or misused, would hurt and destroy him. It should also mean an environment in which he can learn that the trust and respect and love of his fellows are among the happiest things he can possess and that they can only be earned by trustworthiness and a loving, willing spirit.

Granted then that freedom is a relative term, how shall we determine the amount of freedom to be given to children in home and school?

Freedom and the Child Since from the outset the child is a member of a group, this at once sets a limitation to the amount of freedom he can be given. No child should have
freedom that makes it an undue nuisance to the whole group. To ignore this is to develop egoists who will not later fit into the social scheme. On the other hand, to discipline by external means is to impose arbitrary laws on a child, instead of helping him to realize and accommodate himself to the essential laws by which his life is bound. Such discipline, while much easier for a teacher, will develop either a rebel or an automaton, neither of which is a free personality. School should help the child to become self-disciplined, so that he may use his adult freedom wisely.

The extremist will argue that many of our adult standards and conventions are false, and that we must make children free of them, and let youth develop new values. This is partly true. But many extremists are rebels against any system that is not new, and unconsciously give their pupils a freedom that is not true freedom, but an attitude of being 'again the government', whatever the government may be.

Strive as one may, one cannot get away from unconscious personal influence in human relationships. The more the child likes his teacher, the more will he be influenced by him unconsciously. This is best illustrated in so-called 'free art work'. One is often told that the work is 'absolutely free', but there is always the stamp of the teacher's unconscious influence, in spite of the fact that there is more individual self-expression here than in the old-fashioned art class. The teacher's character, therefore, is all-important. We need more teachers who are themselves psychologically free; for real freedom cannot be given—it is communicated. Every teacher to-day can study the path to individual freedom and can analyse himself. One thing he may be sure of—his own inhibitions, frustrations, mental and emotional blind spots, will profoundly affect every child with whom he comes into contact, and may in some cases do much damage, damage which cannot be seen, checked or measured in its incipient stages.

There are many schools where the children are given a great deal of licence in external behaviour but very little true freedom; for though one finds that 'sloppiness' in general behaviour is sometimes called freedom, freedom is, of course, far more a thing of the mind and of the spirit. In an educated group, we can readily get a consensus of opinion that a certain standard of personal cleanliness is a requisite of what one may call 'social amenities'. The extremist will argue that a child must not be made to be clean—that in time he will want to be clean of his own accord; but surely this runs counter to all proven theories of habit formation? Is it worth while to give a child numbers of personal decisions to make, some of which may create conflicts about daily activities that are relatively unimportant and which should be relegated to the sphere of automatic habits? Many things of this nature make for social amenities in a community—punctuality, tidiness, manners, personal appearance, respect of property. The fact that a group of children are untidy in personal appearance, grubby, unmannier and without respect for the property of others, is no indication that they are free in the true sense of the word. In fact, on the contrary, it may mean that they are 'bound'—hampered in later life by lack of habit formations, and their real mental freedom is consequently limited. Children who have been given this mis-named freedom in early school life are often seriously handicapped by lack of technique when they later have something creative to express.

This criticism of disciplinary procedures found in some of the extreme schools must on no account be taken as a refutation of the need for scientific thought on the whole question. Let us take a few concrete examples by way of illustration.

A boarding school had been established in a fine old mansion, and visitors used to exclaim: 'What a pity for children to use this beautiful parquet floor as a hall!'—'What a pity that they should run up and down this lovely oak staircase!' But after eight years' service the parquet floor and oak staircase are still unspoilt. The children's freedom has not been curtailed, they have been taught to value the beauty and to be proud of possessing it, and they have somewhere else a place where they can romp.

The old preparatory school for boys fills me with horror at the ugliness. It was taken for
ranted that small boys would do damage, and so they were given only ugly unbreakable things. In a new preparatory school which now has been established in an old country house for eight ears, the bedrooms are simple but charming, with distinctive colour schemes, the classrooms are like studies. All that the boys use is simple but beautiful. They are not in the least repressed; but they appreciate and value their surroundings.

In the old type of school, science laboratories and craft shops were rigidly locked except in class time: in the new type of school they are left open for unsupervised work out of school hours. There are rules, of course, and age limits, but where these rooms can be left open and used advantageously, it is, I think, a sign of the right kind of freedom and self-discipline.

Those of us who have attempted to put into practice any form of real self-government know that among the children themselves the pendulum swings between a great many rules and sanctions and the abolition of most of them as they become irksome on the plea that 'we must trust every individual of the community'. In a children's community, as in adult communities, there are always those who either cannot discipline themselves or who are too selfish to do so, and once again the governing body has to impose regulations and sanctions. In all matters which make for pleasant and constructive community living, we find that the aim is towards freedom within an ordered environment. The degree of compulsion needed to obtain this ordered environment will vary according to the ages of the children, their background and the general tone of the school.

Under the older form of discipline, the rules and regulations that procured this ordered environment were made from above and imposed from above, whereas in the newer type of school the children's co-operation is obtained. The school is their community, and they are its citizens; they must help to make the laws necessary for the good of the whole, and to get them observed. It is a slower and apparently more cumbersome method: it takes a certain amount of time which under the older system was given to academic work; but the value in training, in self-discipline and citizenship, is worth much to society in the future. Democracy will stand or fall in future years by the degree to which every individual unit has been enabled to attain to self-discipline and a sense of citizenship.

The essential difference, then, between the older and newer forms of discipline is that the old imposes from without and the new discipline is imposed from within, with the help of wise guidance and stimulation. Even to this day, teachers spend much time discussing the degree of freedom that should be given in matters of conduct, and ignore to a large extent the more important problem of mental freedom in the classroom. This is probably because classroom discipline is in the hands of the individual teacher, whereas the content of the curriculum is not. Bounded by the examination syllabus, textbooks are prescribed: the whole process has become mechanized to an alarming degree, crowding out the ideal, which should surely be to train men and women to think for themselves. Creative self-expression cannot be encouraged because there is not time on the time-table. We have not yet solved the problem of maintaining academic standards without standardization.

Yet even within the limits of the examination syllabus, an intelligent teacher does not resort to cramming. Time can and must be found for class discussion, for individual reading and elementary research work on the part of the pupils. This, of course, means access to books and guidance in reading. Debating societies, social studies, discussion of current events—all help. External aids, such as wireless and films, can be used with advantage. Above all, a mental attitude of critical analysis rather than of unquestioning acceptance of textbook material must be encouraged, and the mental horizon widened.

It is not easy for a teacher to wish his pupils mental freedom—the tendency is to impart knowledge dogmatically, to snub the child who wants to question, because questioning wastes time. It is easy to dragoon, and so much more difficult to stimulate an individual approach to the matter in hand. Yet the question is a vital one in the interests of the community. The more
individual and independent work that is done by children, the less likely are they to submit to political 'ramps' later on.

Reference has already been made to the importance of the teacher himself being a 'free personality'. Born teachers have always made character development, the releasing of power within the child, an important part of their work. The trouble is that there are not enough born teachers to go round. To help a child to find himself, to be free from inhibitions, to realize his own worth, whether his gifts are practical or intellectual, all these things go to the making of integral personalities, though unfortunately they cannot be measured or tested and do not bring material kudos in terms of successful examination results. The making of a good citizen—of a harmonious, cultured human being—should be the main aim of education. This implies co-operation between parents and all the educational factors within the community. It is perhaps not too far-fetched to say that while educationalists are talking and writing of the re-creation of society through the schools, tackling the big issues that will give greater freedom to teachers as well as to children, it is the ordinary classroom teacher in the daily routine who is shaping the future. It is from his experience at home and at school that the child will form his attitudes, and these attitudes will determine his behaviour as an adult. The first twenty years of life determine whether an individual will be a free personality—emotionally, mentally and socially mature. The school period, while not the only factor, plays an important rôle in determining this.

The aim of true freedom is to give an individual control of his means of self-expression and keep him in touch with the great reservoir of creative and spiritual force within. Such freedom will enable him to adapt himself to changing conditions and to be happy.
THE most important educational development of the last half century has taken place in the sphere, not of organization, but of thought. It has been a revolution in the relations formerly accepted as inevitable between the child and the education offered him. At one extreme stand those works on the training of the young which survived from the thirties to the eighties of last century, and of which the classical example was, perhaps, The Fairchild Family. The assumption was that children differed from adults in being young and bad, two faults which were identified, and that only the remorseless repression of every natural impulse could save them from destruction in this world and the next. At the other extreme stand those writers who plead for a school that shall be a miniature co-operative society, in which formal instruction is reduced to a minimum and which has as its aim to provide an environment where children can pass through a series of interesting experiments in the art of living, whether by work or play does not much matter.

Official documents are not normally characterized by a precipitate acceptance of intellectual novelties, and a recent publication of the Board of Education reveals the change of opinion. The insistence that the aim of the primary school should be not to impart a minimum of knowledge, but to introduce children to successive phases of experience as they become ripe for each; that the curriculum must be thought of in terms not of subjects to be mastered but of activities to be fostered; that individual and co-operative work in small groups is more important than mass instruction, and that schools must be staffed on a scale to make them possible; that each stage of education must be guided by canons of its own, appropriate to the stage of life for which it is designed, not distorted by the claim that it shall prepare children for the next, by the pressure of examinations or by the demand of the practical world for serviceable employees; that the primary school should be the school of the whole population, so excellent and so generally esteemed that all parents desire their children to attend it—such doctrines contain nothing novel to educationalists, but their enunciation by the Consultative Committee of the Board shows the set of the current.

The essence of the matter is, on this view, simple. A new race of three-quarters of a million souls enters the United Kingdom year by year: education is the art of assisting their growth. Its business is not to enable them to acquire the formulæ or fit into the moulds thought desirable by their elders. It is to enable them when they are children to be healthy and, if possible, happy, in order that when they are men and women they may determine their attitude to the world for themselves. There is no appeal against human nature, and if children do not grow to their full stature in the environment, educational and social, which we have provided for them, the proper course is not to attempt to alter the children, but to alter their environment and, incidentally, ourselves.

On the practical corollaries of such an educational creed I need not dwell. It would mean, if applied, to mention only obvious and urgent matters of machinery and organization, a great increase in the provision made for the physical welfare of children, a drastic reconstruction of many school buildings, something like a revolution in the scale of staffing, the completion at the earliest possible moment of the reorganization which has now been paralysed for more than two years, and the recognition that the years of adolescence, at least up to sixteen, belong, not to the factory, but to the school. We may recognize with satisfaction that in all these directions the last fifteen years have seen the greatest advance since 1870. But, while we can record some victories, we must also, if we are candid, admit some defeats. The explanation of these defeats is different, it seems to me, from
those sometimes offered. It is not that educationalists are at variance as to the general direction in which we should proceed. There is sufficient agreement on fundamentals to occupy administrators, if acted upon, for the next twenty years. Nor is the root of the difficulty to be found in the economic considerations to which, at moments like the present, it is customary to appeal.

It may be worth while here to recall certain commonplaces of the subject. The first is statistical. It is not true that the increase in national expenditure since 1918 has been largely due to increased expenditure on education. The expenditure of the central government in 1931 was approximately £633,000,000 in excess of its expenditure in 1913. Of that increase, just under two-thirds (65.5 per cent) was due to the service of the debt, to war pensions and to the defence services, and 6.3 per cent (something under one-sixteenth) to increased educational expenditure. It is not true that we devote to public education a large proportion of our annual output of wealth. The latest estimate of the net national income or product of the nation put it at £3,499,000,000 in 1931. In that year, when public educational expenditure was at its highest, it amounted to almost exactly 2.5 per cent of that amount.

The second commonplace is that we do not by a reduction in educational expenditure reduce in proportion the real charge on the nation. I will give two examples. The annual cost of preventable sickness has been put at £100,000,000. Part of it, as we have been told again and again by Sir George Newman, can be avoided by increased provision for the health of children. It is probable, for example, to give only one instance, that if, instead of having under six thousand places in nursery schools (on which we spent £37,992 in 1930), we had fifty thousand, the outlay involved would be more than recovered by the saving on sickness at later periods of life. The actual expenditure which we devoted in 1931 to Medical Inspection, Treatment, and the Provision of School Meals, was £2,225,504.

To give a second illustration—the number of unemployed juveniles in September, 1933, was approximately 130,000. It is estimated that the number of young persons between the ages of fourteen and eighteen available for employment will exceed the average of 1933 by 115,000 in 1935, by 306,000 in 1936, and by 443,000 in 1937. It must be expected, therefore, that juvenile unemployment will be substantially increased. We could, if we pleased, reduce it to negligible proportions, and probably reabsorb some adults into industry, by adopting the course urged on educational grounds by the Hadow Committee, and raising the school age to fifteen. What we are actually doing at the present moment is to avoid the expense of retaining children at school at the cost of a smaller, though not inconsiderable, expenditure on unemployment and of a burden of demoralization which, though not statistically measurable, is not on that account less serious.

These things are platitudes, and it is not in fallacies so easily exposed as those which I have mentioned that the difficulty of winning recognition for these consists. Candour requires that we should face unpleasant truths, and the central obstacle, in my judgment, is at once simpler and more fundamental. It is that while, objectively regarded, the preparation of the rising generation for life is the greatest of common interests, the past development and present organization of education in England have been of a character to make it difficult for that truism to win acceptance. They have been such as to emphasize, not merely that common interest, but also social divisions, with the result that it is not only (sometimes it is not even mainly) by considerations of educational expediency that educational policy is, in practice, determined. Historically, our system is an amalgam, in moulding which philanthropy and religion, the pressure of economic interests, a naif snobbery which would be amusing if its results were not so mischievous, and the thought of teachers and educationalists, have all played their part. Till recently the last has been the least important.

The main lines of educational organization were drawn in an age in which education was regarded less as a symbol of a common citizenship than as a redemptive agency, a charitable enterprise or a social discipline, and in which the permanence of class stratification, qualified by a competitive struggle, was an article of faith. Thanks both to educational and social changes—to the influence
Such features of our educational system are no longer justified in theory; but it would be somewhat sanguine to affirm that they have wholly disappeared in fact. It is still true, for example, that, in the words of a recent report of the head of the School Medical Service, ‘definite, simple and essential as are the fundamental requirements of a healthy childhood, they constitute the heritage of the few rather than of the many’. It can still be stated by an experienced director of education that ‘elementary education has always meant, and still means, a cheap education designed for children who are supposed not to require or to be capable of the same kind of education as the children of parents who have more money’. In spite of the free place system, it is still the case that, in the words of a valuable statistical study published last year by the University of Liverpool, the ‘educational ladder is not so broad as is commonly supposed’, and that ‘only exceptional ability and will-power’ will enable the children of poor parents to climb it. We must recognize, in fact, that the doctrine which finds the criterion of educational arrangements and methods in the realities of child-life is met by, I will not say a counter-doctrine, but a powerful, if expiring, tradition, which blurs educational standards by the intrusion of considerations which educationally are irrelevant. Normally reticent and discreet, that tradition starts at moments of crisis into a vociferous life to crush particular proposals for an.
advance, however convincing the case made for
them in detail, with scepticism as to the
importance of public education in general.

For myself, I should be lacking in candour
if I did not state my conviction that the only
basis of educational policy worthy of a civilized
nation is one which accepts as its objective, un-
popular though such a view is in England, the
establishment of the completest possible educa-
tional equality, and that it is the duty of such
educationalists as agree with that view to make
it clear by definite, explicit and repeated state-
ment that that, and nothing less, is what they
mean. The acceptance of equality as the only
tolerable principle of educational policy is not
open to the conventional, but thoughtless, criti-
cism that it ignores differences of natural
capacity and proposes to substitute for the
variety and spontaneity of educational effort a
drab and lifeless mediocrity. Equality of provi-
sion is not identity of provision. It is to be
achieved not by meeting different requirements
in the same way, but by taking equal care to
ensure that varying requirements are met in the
ways most appropriate to each. It means that
the existence of differences of educational treat-
ment or opportunity which have their source
merely in differences of economic circumstances
must be recognized as an evil which, though it
has an historical explanation, is none the less
gross, and for the removal of which no effort is
too great. Were such a view accepted, so far
from its result being a mechanical uniformity, it
would be a great increase in the range and
variety of educational provision.

It is not difficult to think of the practical
changes which the more general acceptance of
the idea of equality would produce. I will give
only one example. Regarded historically, the
policy known as Reorganization is merely the
latest phase of a movement by which, during
the last quarter of a century, the gulf between
elementary and secondary education, once two
separate worlds, has been partially spanned.
I should be the last to question the advantages
of that policy, now, unhappily, almost arrested;
but it is to be observed that, while it rests partly
on the Report of the Consultative Committee on
*The Education of the Adolescent*, it is not being
carried out with the full logic of the argument.

I am not referring merely to the fact that, till
the age of school attendance is raised to fifteen
Reorganization must remain a torso. There is
another aspect of the matter which is hardly less
important. The break at the age of eleven
which has received most attention, was only one
part of the Committee’s recommendations. An
equally important part, to which that change
was to be a means, was that education after the
age of eleven should be classed as secondary
and that all children should pass at about that
age to some form of secondary education in
schools varying in type but equal in status. That
essential part of its proposals, the desirability of
which was emphasized by the majority of wit-
tnesses representing organizations of teachers
and administrators, as well as by educational
theorists, has not hitherto been implemented.

The result for the future may be serious. It is
not only that the anomalies of an arrangement
under which primary and secondary education
are not fully continuous, but overlap, are per-
petuated. It is a misdirection of ability and a
misuse of educational resources, both of which
are heightened by the different principles on
which different types of secondary education
are financed. Children better fitted for the more
practical curriculum of a Central or ‘Modern
school are sent to Grammar Schools, because
the latter are supposed to carry a higher pres-
tige. Children more suited to the latter are sent
to the former, because the former are free and
the latter charge fees. Such an arrangement is
difficult to justify on educational grounds. It
was clearly imperative to end a meaningless
division between elementary and secondary
education—origin a social and not an
educational division—by recognizing that
much education formerly called elementary is
in reality, secondary. But, having at last begun
to do so, we ought not to commit the gratuitous
imbecility of establishing or perpetuating an
equally meaningless division within secondary
education itself. If we are to escape that danger,
we must plan Reorganization on somewhat
larger lines than those hitherto followed. We
must act, I submit, on the principles laid down
by the Committee, that secondary education is
to be regarded as embracing institutions of a
wide variety of type, which, however different
in curriculum and educational methods, are
nevertheless species of one genus. We must get
in short, of arbitrary administrative and financial divisions, must aim at levelling up standards of staffing and equipment in post-primary schools to those thought necessary in grant-aided secondary schools, and must make public secondary education, whatever the name given to the school where it is carried on, a public charge.

When I am asked why it is that, when there is so much practical work to be done, I labour the importance of a principle, which, even if admitted, can only gradually be realized, I reply emphasizing two considerations. The first is severely utilitarian. A far larger measure of educational equality than exists to-day is the necessary condition of meeting the demands of the world economy in which we now find ourselves. In the period which lasted till 1914, this country was still carried forward by the momentum of earlier economic achievements. Enjoying as it did some of a monopolist's advantages, it was not compelled to mobilize all its energies. That privileged situation is now ended. The asset conferred by priority of economic development has disappeared. Unless the standard of welfare is to decline we have to effect large readjustments, to find a substitute for lost advantages in a more intensive cultivation of our human resources, to depend less on cheap coal and more on trained intelligence. In such circumstances capricious educational inequalities, which make it difficult for the nation to develop to the full the powers of all its children, or which prevent ability moving to the tasks for which it is best fitted, are not merely offensive to good manners and good sense; they are an economic burden which we cannot afford to carry.

My second reason for emphasizing such considerations is less ponderable but not, I think, less important. A nation may properly look to its educational system to promote and express a common culture. But the educational system can be a principle of unity only if it emphasizes by its practical organization that there is one department of life at least from which the influence of inequalities of circumstances is to be rigorously excluded. In so far as in its own structure it reproduces lines of social cleavage, it not only reproduces but also deepens them. A nation reaps what it sows, and in such circumstances the pious hope of its well-intentioned moralists that antagonisms may be exorcised by a spirit of co-operation would be insincere if, as is more commonly the case, they were not merely unintelligent. Nor is such a reflection the visionary sentimentality which, doubtless, it appears to some of my audience. Whatever conclusion may be drawn from the reversion over a great part of Europe to government by violence, there is one, I venture to think, which is not open to question. It is that the adjustment of conflicting interests and discordant claims by discussion, persuasion and consent, if possible at all when ultimate issues are raised, is possible only in a society in which all needless obstacles to mutual comprehension have been removed. An educational system which accepts Equality as its principle is one agency for removing them. The opportunity of establishing it in England still exists. It will not exist for ever.

THE NEW ERA

The April and March numbers will be combined in one enlarged issue. There will be authoritative articles dealing with education in Great Britain, The United States, Russia and Finland, and others devoted to some of the topics to be discussed in July at the South African Education Conference.

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The New School at Erith
A. J. Lynch

Much, but not too much, has been written in praise of the new Northumberland Heath School at Erith. It would be difficult to say too much of such a building, which has been planned with rare vision and regard for the present and future needs of both the older and younger generations who live around the school. It is one of those school buildings—there are of course others, for example at Barking, Chesterfield, Salford, and so on—which form a fine example of what a school building ought to be.

Room for Growth

Erith is now a completely reorganized area; that is to say, suitable provision has now been made for all its children both above and below the age of eleven. Before this reorganization took place, it is interesting to recall that there were in the area seventeen instances of two classes being taught in one room; now there is only one. There are eleven school department with an assembly hall, or a room that can be used as such, where before there were only three. The schools have now twenty acres of playing-fields when before they had none. There are now four Handicraft classrooms, and four Domestic subjects classrooms, as compared with one in each case before the change. The schools have to-day three permanent and two dismountable school stages, whereas before reorganization there was not one. For Science there are now five rooms instead of one; Arts and Crafts enjoy six rooms when before the change the schools had none. Classes of over fifty have now been almost entirely eliminated.

The result is that children have more elbow room and more floor space with corresponding benefits derived from freer movement and more light and fresh air.

These details of change are taken from a statement made to the Erith Education Committee by the energetic and devoted Director of Education, Mr. Frederic Evans, M.B.E., M.A., to whom Erith owes so much in this matter. They show conclusively that reorganization with him and his Committee was not a haphazard thing, but a scheme deliberately designed to provide for all children in their area a larger and fuller life.

In this matter also, the scheme owes much to the driving power of the Chairman of the Education Com-

A class room at Northumberland Heath School showing the sliding doors which can be opened in warm weather.
Open-air Geography on the flat roof.

by curtains to allow lantern slides or small kinema films to be shown.

There is a Craft room with separate store attached, the store having a numbered locker for each of the thirteen forms using it. The Science rooms are thoroughly modern, being provided with a demonstration bench, movable teak tables with gas connections, side tables with sinks, and, nearby, a glass-fronted store and an electric water heater. The children are seated on rubber-shod laboratory stools which can be pushed under the table when not in use.

The Handicraft rooms are equipped for Woodwork and Metalwork, and here too are lockers for each form. Every arrangement has been made in these rooms with an eye to future development if, and when, financial stringency eases. Lathes and circular saws could easily be installed. Similar provision in Science and Crafts is made for girls, but, in addition, they have their Domestic Subjects room which, besides the ordinary equipment, contains a 'flat' consisting of a kitchenette, a bed-sitting-room and bathroom. The Art rooms for both boys and girls are remarkably well furnished.

Perhaps the chief feature in this beautiful suite of buildings is the Great Hall, which can be divided by a sound-proof partition into two halls, each containing a stage—one for dramatic work, and the other for kinema shows. The kinema apparatus is actually installed, and the dramatic stage is furnished with proscenium, footlights, spotlights, and all the paraphernalia necessary for dramatic performances. Velour silk lined curtains in fawn for the stage

Buildings

It was in that spirit that the new school at Northumberland Heath was conceived. The building is quadrangular in form, the 'quad' itself being turfed. The ordinary classrooms, situated round the quad, call for no special comment except to say that they are designed and equipped according to the latest modern standards. The special rooms, however, are very striking. The geography room, besides being larger than the others, has a flat roof above it for observational work and also for use as a solarium; the room can be darkened

committee (Mr. Christopher Whinnerah) who comes from a family with traditions in education since he is the brother of Alderman John Whinnerah, twice Mayor of Barrow-in-Furness and for many years Chairman of the Education Committee.
and bottle green for the proscenium have been fitted, the former taking well the infinite range of colours possible through the use of the electrical switch and dimming board.

No reference has been made to the arrangements for medical inspection and for washing and heating, yet enough has been said to show the care and thought which have been put into the whole undertaking. Mention, however, must be made of the fifteen acres of playing fields which surround the school. To those who associate the elementary school with small and unsightly tar-paved yards, this provision of ample playing fields is indeed a joy to behold.

The School—a Cultural Centre

There is another aspect of the scheme which merits consideration. From the very outset, the Education Committee had in mind a three-fold provision. Accommodation was needed for evening classes for adult students; then, as Northumberland Heath was fast becoming the centre of a large housing development, evening school at that spot was obviously desirable; and last, but by no means least, there was in Erith a dearth of suitable buildings which could be used to encourage an interest in the Arts and Crafts, in Music and Drama, and in healthy social functions.

The school was therefore planned to meet adequately all these three educational and cultural needs, and it was felt that by making such varied provision, a greater range of facilities would also be available to the children in the day school than if their own minimum needs only were considered. In these days there is a growing conviction that every school should not only, in itself, be a hive of industry, but that it should also be a centre of activity for the district. This conception of the school is coming to be widely accepted and the Northumberland Heath School is a supreme example of an attempt to bring this about.

A ‘Four-Track’ School

Just as keen foresight was brought to bear on the planning of the buildings, so great care and consideration have been bestowed on the educational arrangements. Here, for example, in broad outline are the principles which form the background against which the school is projected. The schools are intended to be ‘four-track’ schools, this meaning that on entry, each year-group is classified in four separate forms, thus enabling a wide range of abilities, interests, and aptitudes to be catered for. The bright child is not held back, nor is the slow child left behind in the strenuous race. Some children are enabled to develop on academic lines, and others find their feet through training in the practical skills. The world is a place of all sorts and conditions of men and women and these schools meet the needs of all sorts and conditions of boys and girls. The fact that we live in a community is not forgotten, nor are its social implications. Although the forms are classified according to abilities, there are also ‘Houses’ into which the children are grouped into social units, quite irrespective of their academic standing. Thus all the values of life obtain their appropriate recognition, and ‘brainy’ children co-operate in school projects with children whose only chance of expression is through the practical arts. This will have a great effect on the psychology of future generations.

A walk through the classrooms while the school was at work showed clearly how these principles were operating. It was interesting to note, for example, that the ‘four-track’ method of organizing was not a severely rigid thing. Pupils of A, B, C, or D classes were frequently interchanged on the basis of ‘difference of bent rather than of ability’. Girls were engrossed in their Craft and Domestic rooms; boys were busy in the Woodwork room where they were in the care of a master whose craft and cultural standards were of the very best. The girls were in possession of a fine portable gramophone which they used as an aid to French, Dancing,
Pupils everywhere were free and happy, and there appears to be no reason why, with a continuation of the enlightened policy with regard to administration, which now exists both in the school and in the local authority, this great experiment of the Erith Education Committee, and its Director should not be an outstanding example of what can be done under a well-conceived scheme of reorganization in the interests of the rising generation.

Discipline and Punishment

RICHARD SEYSS-INQUART

Richard Seyss-Inquart.

Pupils, however bad his previous history, is first treated kindly and the majority of boys respond more quickly to such treatment than to compulsion. Many of our pupils have experienced the darker side of life, have passed through every kind of want and privation and suffered hardship and brutality from their childhood, and for this reason at first they frequently meet kindly treatment with suspicion: they cannot believe that we mean well towards them. But they gradually relax and come out of their shells, and the understanding kindness shown to them awakens that confidence without which successful educative work is impossible, and which is the best treatment for the inferiority complex at the back of so much of their truculence and obstinacy.

It is only when kindness fails that we adopt stricter measures. These we find to be particularly necessary with boys who have been spoilt by their environment and therefore ill prepared for life. Their corruption is of long standing, and deeply ingrained in their hearts is that which we might call criminal conscious-
ness or criminal pride. These unfortunate creatures will become hardened criminals if they are not dealt with soon enough. If they feel a strong hand over them, to which they must in all circumstances submit themselves, they give up their opposition and often manifest a surprising willingness to learn.

The Punishment Group

We come now to the second but no less important principle of our work, which is that especially corrupted and aggressive boys must be separated from the more easily influenced pupils. This prevents the former from terrorizing their companions, or from becoming a source of dangerous moral infection and so undermining the discipline of the Home. The more we can keep the dangerous elements under control, the more freedom we can safely allow the others. For such unbridled elements we have instituted a special group which we call the Punishment Group. This is entirely separated from the others and enjoys no privileges of any kind. It contains about twenty boys, a comparatively small number when one takes into consideration the total number in the Home. Many a boy who showed truculence and would have developed into a terror to the Home has greatly improved in this group.

Side by side with the Punishment Group we have a partially separated group, in which the pupils enjoy a limited number of privileges and a certain amount of freedom. This is the Transition Group, and here we have boys who are easily influenced and have a highly developed tendency to vagrancy and escape. We have to accustom them gradually to the Institute, and must give them no opportunity for running away, since in their case escape is attended with serious moral dangers and makes successful training even more difficult. In addition, of course, attempts at escape have a bad effect on the discipline of the Home.

The Power of Privilege

All the remaining sixteen groups have a great deal of freedom, which is increased by stages in proportion to good behaviour. Our boys have exeats and leave: they take part in Youth Meetings in the town and go to all kinds of young people's concerts and sport competitions. Boys who prove themselves specially worthy of trust form a Free Group, elect their own leader from amongst themselves and receive passes which entitle them to leave the Institute in their free time. About twenty years ago we should not have dared to educate young criminals in such freedom; but to-day we know that it is precisely this which has such excellent results among our boys, and that the discipline of the Institute is greatly furthered by such liberty. The boys are proud of their freedom and seldom abuse it, since they know that its misuse not only means the loss of their privileges but is also considered dishonourable. Each privilege is a spur to good conduct. The boy must understand that the shaping of his fate lies in his own hands, that if he behaves himself he can make his life in the Institute easier and much more pleasant. Our most effective means of correction is the withdrawal of privileges and freedom, and therefore removal to groups with few privileges or none at all is the severest possible punishment. But even the forbidding of a visit, the exclusion from a good concert or cinema show, or the can-
celeration of leave, touches the boys very nearly.

Apart from the withdrawal of privileges we have no punishment except incarceration, the severity of which can in special circumstances be increased by the curtailment of food supplies. Our prison is far from inviting; it is a cell where there is nothing but a straw mattress, a stool and a lavatory. In this dreary barred room the young transgressor has time enough to ponder on his crimes. The cell is only used in the case of serious misdoings and a curtailment of food is only ordered with medical approval. The period of seclusion is generally a day, but may be increased to a week.

Judicious Punishment

Special care is taken to see that punishment does not break the boys’ spirit. They must understand that it is for their good, and will not be held against them if they show a real will to improve. A pupil who has been relegated to the Punishment Group must realize that promotion even to the free groups is open to him on good behaviour. We are continually proving that the majority of our boys see the need for and usefulness of punishment. Boys in the Punishment Group ask to be allowed to stay there longer until they feel ready for transition to another more privileged group. In this Punishment Group, which is cut off completely from the outer world, even an obstinate sinner will grow thoughtful: he sees his mistakes and forms plans for improvement. In the Transition Group, too, boys will often refuse removal to a Free Group because they do not feel able to withstand the temptations to renewed escape.

Punishment must be just if it is not to engender bitterness. It will only be just when it is suited not only to the misdeed and its circumstances, but also to the boy and his character. Nothing could be more disastrous than that a youth should receive the impression that punishment has been inflicted arbitrarily or as a result of bad temper, and that he has been treated unfairly. If, for special reasons, an exceptional measure of harshness or mildness is adopted, it is advisable to explain this to the other pupils in order to prevent their thinking that uneven measures of punishment are employed. For example, it is customary in cases of attempted escape to give cell punishment for a fixed period; but there will be times when this punishment must be lessened or increased. A boy from the mountains who suffers particularly from home sickness in the flat, uninteresting surroundings of the Institute, and finally escapes in order to try to reach his home, must not be so strictly dealt with as a boy from Vienna, who escapes in order to meet some doubtful boy and girl friends, to play about or to commit some criminal act. In the address which I am accustomed to give every week-end to the pupils, I talk about these cases and try to make the boys understand that though the same misdeed may be in question, the guilt and therefore the punishment also may vary. If the boys feel that there is justice in all our punishment assignments, they will accept as earned the severest penalties for themselves.

Learning hairdressing in the barber’s shop.
We do not overlook the fact that the method of punishment must be carefully chosen. For this reason we increase the severity of an imprisonment by means of food curtailment in those cases where boys are lazy, trying to avoid work or refusing it altogether. The old proverb—Who works not, eats not—is at once apparent to our young people. In particularly bad cases of incompatibility we have also employed this practice of incarceration, putting the boys in one cell, and we find that they almost always avail themselves of the opportunity of reconciliation.

Lastly we must point out that punishment for young people must never lessen their self-respect. Recrimination must be avoided, and corporal punishment as a system is to be rejected, since it undermines the boys' self-confidence, arouses a sense of inferiority and makes them obstinate and unreceptive to educative influences. For this reason little can be done in the Institute with children who have been beaten in their youth. Although we reject corporal punishment as a system, however, we do not consider it a misfortune when a teacher occasionally lifts his hand in just anger. Neither do the boys take this in bad part: they seem to have a particular affection for a teacher who shows his feelings in this way when they know that he means well towards them.

To sum up, we believe in the practice of kindness and the granting of privileges and freedom which are only curtailed when absolutely necessary. Punishments must be just: they must not only fit the crime, but the individuality of the criminal: they must not break his spirit nor harm his self-respect.

Finally, we believe in cultivating a sense of humour. Our boys and their circumstances are not altogether tragic: we must be able to laugh with them frankly and freely. And while these principles are followed in the Institute, we are able to maintain discipline with even the most difficult material.

PARENTS AND CHILDREN

We regret to announce that we are unable to continue the publication of this Magazine but in future the Home and School Council will publish their own Magazine under this name, and subscriptions can either be transferred to it or to the New Era.
The study of biology helps us to understand life, by teaching us something about ourselves and our environment, by teaching us something about the human race to which we belong and its past, and by teaching us something about the possible future of mankind, its welfare and happiness. I can now examine these claims under two main headings—the individual aspect and the racial aspect.

1. The Individual Aspect of Biology. Man is an animal. We are all animals and we all have bodies. My body is what I call alive. If you will grant this perhaps you can understand my desire to know how my body works. This desire to know how the body works is a very common one in children. They are interested in their bodies, and in the functions of their bodies. This fundamental curiosity about life provides at the outset a tremendous and passionate motive that can be utilized in the study of Biology, which is the science of life. I can give two examples of this curiosity in children.

(a) When sheep are slaughtered at the school,* the very youngest juniors are always among the first to crowd around the slaughter house to see what is inside the animal. These juniors, who become familiar with birth and death on the farm, never have any horror of dissection and are usually willing to cut up their pets when they die.

(b) Among the first questions asked by a class on beginning to study an animal, are ‘How does it have young?’ and ‘Is it male or female?’ To satisfy this curiosity about sex as early and as fully as possible is one of the important functions of Biology teaching. A proper sex education, which is, I believe, best based on biological instruction, is one of the essentials for ensuring individual happiness.

2. The Racial Aspect of Biology. Mankind is a species with certain characteristics. We are interested not only in ourselves but in our race and its history. Children are interested in their ancestors, however remote, and instinctively seem to recognize their kinship with all living creatures: to them evolution is a wonderful story. As soon as they are old enough, they will want to make life better and finer, and this

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Note: A course of Hygiene runs in every class in the school, taken by the Headmaster, and correlating with the Biology classes.

Time given: In the senior school one practical period of 1 ½-2 hours per week to each science, plus assignment work from ½ hour to 1 hour according to the form.

* Abbotsholme, Ransom, Stafford.
idea of biological progress shows how with conscious purpose they can help mould the future of the race closer to their ideals. The sociological and economic applications of Biology to human welfare are rapidly becoming more numerous, and I have no space to refer to them here. It is sufficient to point out that service of the race, its preservation and reproduction, are such powerful instincts that it becomes essential for their emotional power to be understood, controlled, and directed.

The Possible Position of Biology in a School Curriculum

In order to show how the sciences may be fitted in and correlated I intend to describe the particular scheme that I have carried out at Abbotsholme School. It must be understood from the outset that Abbotsholme is a school with exceptional opportunities for pioneer work, and I may have been able to do more than is possible in a school with less faith in the prominence that should be given to Biology. By reference to the outline of science courses given in the accompanying table it can be seen that Biology is the one continuous science subject.

Outline of Science Courses at Abbotsholme School

It begins in the Junior School, at the age of 9, as Natural History. Physics begins at the age of 11. From then onwards a boy gets a long practical laboratory period in two sciences each week, and from the age of 12 a varying amount of assignment work fitting in with the Dalton Plan of the Senior School. At the age of 12, when Chemistry begins, Physics is still going full time, and to fit all three sciences in, Biology has to be reduced temporarily to one third, while Chemistry has two-thirds of the time available for the second science. The next year Physics is dropped entirely, Biology and Chemistry being the two full sciences. In the fourth form at 14 the Chemistry is dropped for a year (all the elementary work necessary to correlate with Biology having been done), and Physics takes its place. The next year means as a rule a choice between Chemistry and Physics, according to which is to be taken in the examination in the following year. In the Certificate year special courses are arranged to suit varying needs for the examination. The general tendency is to drop Chemistry as a Certificate subject, as it is felt that it is not such an important subject for general education as the other two sciences. Its chief use in the pre-certificate stage is for the understanding of Biology.

Special Features of the Abbotsholme Biology Syllabus

The first year of Senior Biology in the third form at the age of 12 or 13 is a most important one. The boy is immediately introduced to the details of laboratory technique, and is thus enabled to be more exact and accurate than in his previous Nature Study work in the junior forms. The purpose of the Nature Study course is to provide a concrete and macroscopic experience of plants and animals in their living environment out of doors and in captivity. In the light of this experience the biological principles and generalizations of the senior course may be more easily understood and realized. At the same time all principles are given a sound practical illustration, and the examination of specimens in the laboratory by means of special instruments and technique now becomes a necessity. I believe there are one or two essential differences between the order of treating the material in this course and the usual one in schools. Of these differences I will mention the four most important.

1. The early use of the microscope.
2. The rapidity with which the vertebrate type is reached, with direct references to mammals and human beings.
3. The early practice of dissection.
4. The immediate study of fundamental biological processes, such as metabolism and reproduction.

The first year’s course might be summed up in four words—life, food, development, sex.

The microscope work begins with typical cells and tissues, and works through the Protista to Hydra. Methods of feeding in plants and animals are specially studied, linking with Chemistry lessons on foodstuffs. Development is studied with Amphibia and the first dissection is of the frog, with special regard to the alimentary, renal, and reproductive systems, and reference to the same systems in human beings. Sex discussions are illustrated by a dissected rabbit or other mammal.

In the next year at the age of 14 the comparative study of animal structure is continued with further dissection. A course of experiments on soil, and another on plant physiology then follow with their direct correlation with the school farm and garden. In the summer, aquaria again become a main interest, and experiments are done on frog’s and newt’s eggs and tadpoles, to show the effect of diet and other conditions on growth and development. An introduction to hormones and elementary embryology can thus be given.

In the next year, the one before the examination year, most of the work is not on the examination syllabus, and a general education in Biology is given. This is a great benefit to those who may leave after the matriculation, and who without this course would leave school knowing nothing about the theories of evolution and heredity, and the applications of Biology to human welfare.

I emphasize the three years of ages 13, 14, 15, because they contain the real central portion of our science syllabus. They are also the ages at which the largest number of boys and girls are still at school.

Reasons for the Importance of Practical Work in Biology

Biology is a science. Science must be based on experiment, and has throughout history been based on experiment. The scientific method consists in the making of observations, the formation of hypotheses, and the testing of these hypotheses by ex-
periment. Observation and experiment must be strictly practical, and in contact with the raw material under investigation. I have no sympathy with science teaching that is composed of too much talk. A scientist must use his hands and must be to a large extent a craftsman. Moreover, it is a general principle of education that the best way of learning is to proceed from the concrete to the abstract—to learn by doing. Apart from these general principles, in particular, much of Biology the vocabulary is quite unintelligible to students unless they can see and touch, or obtain a concrete and real picture of what the teacher is talking about. Objects of the universe are three-dimensional. Immediately you make a diagram you abstract from reality and lose one dimension. If you describe an object in words that do not convey a visual picture you are immediately becoming highly abstract and unintelligible to the learner unless he has fully mastered your vocabulary.

A living creature is not only a three-dimensional solid, but it is also in motion: it is a constantly changing three-dimensional entity, never the same from one moment to the next. You cannot put an animal into a book; you must see it to understand it. To take an example—the simplest form of life is an ameba. You cannot describe an ameba: if you have never even seen one nobody can adequately describe it to you. You must get a microscope and look at one. Again, think of a blood circulation! What do you see? Perhaps a rough picture of a heart with some red and blue pipes coming out of it, and little arrows to show which way the blood is flowing. How much more complete an idea of a blood circulation you will have if you have done a dissection, and seen the vessels and capillaries in reality. Better still if you have seen the beating of a frog’s heart in its body after death, or the endless coursing of the blood corpuscles round the web of a frog’s foot.

The simplest terms in Biology, such as a cell, a gland, a nerve, a digestive system, a heart, have only a partial meaning until the actual things to which they refer have been seen. In fact, the main argument for practical work, and for dissection, is that it is the best way of learning the subject. Moreover I have found that it is the practical approach that most appeals to the pupils. Once a class is in the habit of expecting practical illustrations, and doing experiments themselves, it is almost impossible to give a series of theoretical lessons. The boys will not allow it.

Sex Education

The horrors and sadness of ignorance about the subject of sex are obvious in the world to-day. I think that correct early teaching can lay the foundations of a better outlook. The most important thing that I have learnt is to apply, as early as possible, all talk about sex directly and plainly to human beings. The child is not passionately interested in how ferns fertilize, or the sex life of the buttercup, but he is passionately interested in such questions as where babies come from, how and why. Consequently the boy should soon reach a stage where the answers to such questions can be related to the rest of his biological work. It is not a far step from a small mammal to a human being where birth is concerned. It is essential to take that step from animal types to human physiology. Why is that step so seldom taken? I am told that it causes embarrassment to the teacher. I do not believe that if the proper relation of frankness between the teacher and the class has been established, the teacher need have any fear or uneasiness. He will find it possible to answer critical questions directly and honestly. The first time in my course that sex comes up for discussion is during the first senior year, usually during the first dissection. It is then possible to give details of sex differences, fertilization and birth. About the age of 15 further questions are asked which usually concern such points as the sex act itself, the frequency of ovulation, and other details of pregnancy and prenatal life. Before a boy leaves school I think he should have information of the causes and effects of venereal disease.

I cannot now enlarge on the subject of sex education, important though it is. It is necessary to add that questions of morality need not be dealt with in a Biology class, although they may arise privately with individuals afterwards. It is the facts that are wanted. These must be presented scientifically and unemotionally, and the individual must be left to arrange his own behaviour in the light of these. He may need guidance in this from some other source, and I do not claim that the whole of what should be included in sex education can be dealt with through Biology. But I do claim that it is the best foundation. Questions of morals and behaviour, when they do not involve definite biological consequences, must be decided elsewhere. Such things as art, tradition and religion, must greatly influence our attitudes towards sex; but I believe that our attitudes should be firmly based on proved facts, and not be mere indulgence in phantasy.

Conclusion

I have stated as the main claim of Biology to a place in education, that it teaches us something about ourselves and leads to a fuller understanding of life. There are three attitudes that result from such teaching, and all contribute towards this understanding. First there is what I call the realistic attitude. It sees human beings for what they are, and does not flatter them. It includes acceptance of the fact that flesh and blood are made of matter like everything else, and obey the laws of matter, besides any special laws of their own. Secondly, there is the impersonal attitude. The student of Biology is able to rise above his own individuality and regard himself as a part of the stream of life: he can see where man fits in with the other animals, and his place in evolution. It is a lesson of humility, but also a lesson of great hope. Thirdly, there is the philosophic attitude. The study of the beauty and complexity of the living organism leads to questions of the value and purpose of life. Is life a by-product of material processes or is it fundamental in the scheme of things? Is the process of evolution haphazard or purposive? Is humanity destined to
carry life to higher levels, or is it doomed to failure and extinction? These are traditional questions that are asked anew in each age. All the sciences, and especially Biology, have provided a great variety of facts, from which our children must infer their own answers to these questions.

**Biology in a Senior Girls’ Elementary School**

*(From a lecture delivered under the auspices of the New Education Fellowship)*

**MARJORIE KNOTT**

**Biology** to me means a study of the science of living: it includes not only living things but all those physical processes going on around us. The children we teach are surrounded by practical examples of applied science—electricity, water supply, drainage, etc.—which they generally take for granted. The biology scheme I have arranged includes much that would be taught in an ordinary secondary school under the headings of Elementary Chemistry, Elementary Physics, including Heat, Light and Electricity, Elementary Botany, Elementary Zoology, Personal Hygiene and Human Physiology. These have been grouped together to form an interrelated whole, and the course aims at helping the children to understand something of the wonderful developments of applied science as a force which intimately affects their own lives. It should do more even than this; for biology might almost be called a study of relations. A study of individual life histories alone will not give a child a biological outlook—it is the study of the relation between those individuals, their interdependence and their influence on one another, that will most help each child to live her own life to the best of her ability. By giving the girls some knowledge of the structure and working of the human body, the course should create in them a real desire to do all in their power to keep their own bodies as healthy as possible. By guiding the instinct of curiosity—so often very wide awake at eleven—the girls’ desire for information can be directed into useful channels and all the odd facts they have discovered can be connected up. In addition, the course aims at developing their manipulative power through practical work, though the amount of practical work which can be done is necessarily limited both by the supply of specimens and apparatus and by the time (only one hour a week) allowed for the science course.

**Arrangement of the Scheme**

The scheme has been arranged as a three-year course for girls of eleven to fourteen years. The children are divided into three age groups and these again are subdivided into classes. This subdivision is based on intelligence. The A’s are normal and upwards, B’s normal to two years retarded, C’s two to four years retarded. The C children work on the same scheme as the A children, for I have found that the C child easily finds out what more intelligent children of her age are doing and is very disappointed if she feels she is not following the same course. Therefore the difference between the work in the various grades lies mainly in the treatment of each subject and in the amount of detail introduced into the work of the A groups.

Wherever possible, the scheme forms a background to the domestic science course. For instance, chemistry done in the second year of the science course may be correlated with domestic science in the third year course, or vice versa.

**Scheme of the General Science and Biology Course.**

**First Year’s Work.** A. Science.

1. Heat. Conduction, convection, radiation, expansion, contraction. Production and measurement of heat, etc. These are all studied in their application to everyday life, and some experimental work can be done under nearly all the headings, because practical examples (fire extinguishers, vacuum flasks, boilers, etc.) come into the lives of the poorest children.


3. Hygiene. Cleanliness, with special attention to skin, nails, hair and teeth. This is mainly revision, but it is necessary, for few children have any real dislike of being dirty. It is only when the child is thirteen or fourteen that she is able to realize the danger of uncleanliness.

B. Biology.

General structure of a simple flowering plant, a simple flower and fruits. Preparation for winter; changes in the lives of plants, animals and human beings. Discussions on the effect on nature as a whole of changes in the life of one living thing. Spring changes: germination. Effects of environment on the structure and habits of animals. The care of pets.

**Second Year’s Work.**

A. Science.

1. Water. Composition, supply, storage, distillation, evaporation, power, sewage.

2. Air. Composition, ventilation, breathing, oxygen, vapours, barometers.

B. Biology.

Study of simple animals and plants: amoeba, slipper animal, hydra, spirigra, earthworm, moss or fern. Pond life: frog (life-history), plant physiology. The children are given some idea of the greater complexity in the higher types of animals and plants as compared with the simplicity of the lower ones.
February 1934

BIOLOGY IN A SENIOR GIRLS' ELEMENTARY SCHOOL

THIRD YEAR'S WORK. A. SCIENCE.


2. Electricity. Magnets, lines of force, dynamos, batteries, fuses, telephones, telegraphs, wireless, domestic uses.

B. BIOLOGY.

1. Human physiology. Digestion, excretion, respiration, bones, muscles, brain and nervous system, sex and reproduction, the relation of the parts of the body to the whole.

2. Elementary dietetics. Experimental work on foods, diet, value of milk.


Sex Teaching

The study of the individual is not a biological study of human life. The biological interest lies in the relationships between individuals, and specially between past and future generations. A study of sex should therefore form a natural part of the physiology course in the senior school. Sex should not be studied as a special subject. During the early part of the science course the children have learnt that all animals begin life as cells. This leads naturally to a study of the human body, and of the male and female genital organs which manufacture the cells. There is no need to slur over this part of the subject: a straightforward description is given and the children's questions are answered frankly. I have taken the subject with four or five separate classes and I have always found that the girls were keenly interested, and discussed the matter frankly and sensibly.

In my opinion it is a mistake to make too detailed a study of the sex of numerous types of animals before reaching human beings or to delay too long before studying reproduction in man. In fact this year I am trying the experiment of starting the human physiology course with sex. The girls are just reaching the adolescent stage and some of them are well aware that the subject will be dealt with during this year, and I think that it is better to satisfy their natural curiosity at once.

I am frequently asked how parents view these lessons, and what happens if some of the younger children want information. I have always found that the parents are grateful for the instruction given in the school, as the majority of them are most reluctant to discuss the subject with their children. I have occasionally met with questions from the younger children, and I always tell them that the subject will be dealt with in the science course, but that if they feel that they must have their questions answered immediately I will deal with them individually.

Difficulties Encountered

Many of the difficulties which we have to overcome could be grouped under one heading—lack of time. Science covers such a multitude of subjects that many must be omitted or dealt with superficially. The child of eleven and twelve is slow in manipulating apparatus and as there is only one hour a week for science, written and experimental work is almost impossible to arrange. Specimens are not easy to obtain, because the new estates springing up round Barking have destroyed the natural flora and fauna.

Finally, may I suggest that a science course to-day should include not only the subjects already mentioned, but a great deal of what is studied in history, geography, English and arithmetic lessons. If more time were allowed for science, not only would more practical and written work be possible, but the child could be assisted to understand much more vividly the connection between biology, science and everyday life.
A very grave obstacle meets us at the outset in any attempt to define discipline in education. This is the intimate connection, particularly evident in England, between education and moral training.

The earliest experiments in freedom for youth known to me were those made in the George Junior Republics in America and in the Little Commonwealth of Homer Lane in England. These were institutions designed to give children who had already failed in social adjustment a new start in life, and were based in the most daring and successful way upon the principle of freedom; but they were not in essence schools at all, and their problems were problems of character and not of learning.

Character Training and Mental Discipline

Where problems of ethics have become indistinguishable from problems of education—and this has happened in the free schools just as it did long ago in the public schools—the child is faced largely with problems of conduct and character; smoking or not smoking; swearing or not swearing; being aggressive to authority or not aggressive. These are not problems of the training of the mind. We have allowed problems of social adjustment to be entangled with problems of personal development, until it is hard to see the subject as an educational one at all.

So long as, and in so far as, our system of education is carried out in schools where the children live as well as learn, this difficulty is ineradicable, and the public schools, with their insistence primarily upon the formation of character, have not allowed us to forget it. The formation of character and the training, development and education of the mind have necessary interconnections at many points, but they are fundamentally different tasks.

In discussions upon school management, ‘discipline’ is usually construed as an ability to keep a number of school girls and boys quietly seated in a class-room for definite periods of time, or conforming to a given pattern of behaviour outside the class. It has nothing whatever to do with education, if education be taken to mean the training and discipline of the intellectual faculties of the human being.

The Disciplining of Desire

But what is the meaning of discipline itself, apart from any specialized activity of the mind or body? All human beings experience almost hourly the fact that ‘desire outruns performance,’ and in the lack of harmony between desire and ability lie many of the most lasting pains of the soul and mind. This lack of harmony may be due in part to prohibitions coming from the environment, but there remains an equal or even stronger element of strain in the conflict arising within the personality itself.

Desire in childhood is terrifically strong, far stronger than at any time in later life; moreover, the ability to wait for fulfilment is a virtue impossible to childhood, and only very hardly learned in later years. In childhood, to wish is to feel, and to feel is to demand instantly with the whole of the self that the feeling obtain satisfaction.

We have said that freedom is the possibility of carrying out anything that the self wishes, with approval from the environment and the self; but before the statement has any meaning, the nature of the self must be understood. Children are faced with the continual experience of passions arising, as it were, from nowhere and sweeping over them to ends they cannot see. The force of passion in early childhood makes the child feel almost as though it itself is in danger of destruction. Furthermore, two desires often arise simultaneously which are mutually destructive to one another. Which arises from the child’s real self? Which is he to be rendered free to obey? The drama and pitifulness of childhood is that the child is totally
unable to answer a query of this kind; he does not know. Nor, at the moment of his rage, or of his acute fatigue, does the normal man know either. To ask either man or child to decide ruly and act wisely at a moment of this kind is to ask the impossible.

A small child in the grip of a violent emotion is usually a child in immediate danger of terror; the emotion is to him an outside thing coming from the unknown upon him, and fraught with grave dangers to himself. By himself he is unable to cope with this thing—his emotion being too strong to express—and often he exhausts himself in temper or tears till a state of equilibrium is restored.

Every human being wishes to be master of himself and to accomplish his desires, but in so doing he is faced with unavoidable obstacles. It is in the nature of the child’s desire that so many of the things which he wishes to do cannot be accomplished: he cannot be a prince, overcome his enemy, know the contents of a book without reading it, make a clock in half an hour, or become an engine driver. Left alone to himself, it is essential that he create, either from inside himself or from the outside world, something to which he can hold and which will give him the counter-balance to his own strivings.

Mechanisms of Control
The name ‘discipline’ is usually given to those devices which one uses for controlling the urgency of desire and acquiring mastery over it. By himself no child can directly achieve empire over his desires. In every human being, three mechanisms come into play during this struggle for control:

1. Strong disapprobation from external and loved authority induces in the child such pain of displeasure and of being outcast from love that fear of a recurrence of this pain holds in check the primary desire.
2. The spontaneous awakening within the child of an emotion which conflicts with the first desire produces an unbearable tension. Then the whole conflict is pushed out of direct consciousness into the deeper regions of the mind.
3. The third and most effective type of check is that given by the nature of impersonal material, which enforces its own laws upon the mind or body that wishes to master it. Thus, hammering a typewriter which one cannot control leads, not to power over it but to frustration of the desire to bend it to one’s will, where hammering a playfellow, or sister, may actually and in reality bend them to one’s will, with disastrous consequences later.

Control gained according to the first mechanism is nearly always disastrous to the mind, if only because it withdraws from the working of the intellect force that might have been behind it. Take, for instance, the impulse of curiosity, an impulse of tremendous power in childhood, and the mainspring of all learning. Met by adult disapproval vigorously applied, a child is only too often given such a horror and fear of his own curiosity that it is inhibited altogether.

As far as we know, little can be done to promote or modify the occurrence of the second
type of control. The laws governing this mechanism are as yet too imperfectly known.

Control of the third type of discipline is largely in our hands; hence the value of all practical education. Frustration of immediate impulse, or failure to achieve our goal at the first attempt, is the only road to eventual mastery of the desire and ability to use it spontaneously. Only continually repeated attempts to accomplish an end bring either satisfaction or joy or real control of the desire itself. Every individual who wishes to achieve conscious control of himself sets up his own barriers, the overcoming of which gives him exercise in struggling and in self-mastery.

Intellectual Ripening versus Character Growth

But the child is composed of many desires: the achievement of harmony is a lifelong struggle. Here we find, in its acutest form, the conflicting interests of intellectual ripening versus character growth. In a sense, character is independent of time, and a victory won is a gain so precious that against it no passage of time can weigh heavily in the balance. In the region of intellectual work, time counts supremely, and time once lost can never be replaced. It is in accordance with our evaluation of the work of intellectual achievement that our decision between these two will ultimately be reached.

Apart from the mere memorizing of facts, there is no hastening of intellectual ripening. There has to be adequate time for brooding and for the gradual assimilation of fact and integration of thought. The child whose energy is absorbed during the years of school life, or even part of these years, in coping with the urgencies of desires in other quarters, will not have either the energy or attention to spare which are essential to the mastering of intellectual tasks. He will emerge into life, richer perhaps in character, but poorer in knowledge and intellectual ripeness than he might have been. School years are so few; the question is whether a child can find his way unaided in these short years to both goals simultaneously—the goal of freedom of character and that of intellectual maturity. Too often the latter is sacrificed to the former, and the real purpose of school is lost.

As I see it, the fundamental problem is the provision for the child of such real impersonal holds and checks as will set him free for the labour of intellectual effort, effort chosen by himself and directed by himself along such lines as his own desires lead.

Considered from the point of view of intellectual growth, the function of discipline is to reinforce character by selective action in such a way as to set it free for intellectual achievement.

International Notes

New Education Fellowship News

World Fellow Teas

At the weekly Friday teas (5.0 p.m.) held at 29 Tavistock Square, London, W.C.1, for members of the Fellowship, friends and enquirers, the following talks will be given during February:

2nd February, Mr. A. J. Lynch: 'My Visits to the new Northumberland Heath Senior School, Erith, and to Northcotts School, Walthamstow.' 9th February, Frl. M. Kirschner: 'My Method of Music Teaching.' 16th February, Dr. F. H. Dodd: 'Commonsense Psychology and the Home.' 23rd February, Dr. E. Kaufmann: 'New School Buildings Abroad.'

Fellowship Personalities

Professor José Rezzano, for many years the representative of the New Education Fellowship in the Argentine, has been appointed a member of the National Council of Education which is the chief educational executive in that country.

Mr. F. A. Cavenagh, Professor of Education at University College, Swansea, has been appointed Professor of Education at Reading University.

A Conducted Party to the South African Conference

The Overseas Education League, whose purpose is to promote a better understanding between the various parts of the Empire and which has since 1910 arranged and conducted many tours with this aim, is co-operating with the New Education Fellowship.

For those who wish for the maximum of enjoyment with a minimum of preparation, the League will make all arrangements. Its party, we hope with representatives from Canada, will leave Southampton about 21st June (First Class accommodation on Intermediate Steamer) and return there about 5th September; it will be at Johannesburg for the Con-
Raising the School Leaving Age

Readers of Mr. Tawney's article in this issue will be interested in the proposals put forward by Mr. H. N. Penlington, M.A., President of the National Union of Teachers, at the twenty-seventh North of England Education Conference at Hull, on January 4th. He pointed out that between August, 1930, and May, 1933, the registered number of juvenile unemployed never fell below 100,000 and said that what seems to be needed is an Enabling Bill authorizing the President of the Board of Education and the Minister of Labour jointly to raise the leaving age to sixteen in any area or group of areas, in consultation with the local education authority.

Books for the Unemployed

Inaugurated by Lord Eustace Percy, the 'Million Books for the Unemployed Scheme' is now taking effect. Unemployment Centres in all parts of the country have received their first consignment of books and the public's response to the scheme has been remarkable. More than 100,000 books have now been received, and half of these have been subscribed by London. More books are urgently needed and demands for them are pouring in from unemployment centres. The greatest need is for fiction and text books, and the Rhondda Valley sends repeated requests for books on economics. Nine depots have been established in different cities and are sending out books to centres in their areas. Most of the cost of the scheme is being met by a subscription of £500 from the National Union of Teachers.

Biology in Schools

Those who attended the lectures arranged by the New Education Fellowship on the Teaching of Biology in Schools will be keenly interested in the work done in this connection by the British Social Hygiene Council, Carteret House, Carteret Street, S.W.1, which set up an Educational Advisory Board in March, 1933. The objects of the Board are to consider methods of promoting the teaching of biological sciences, to secure adequate recognition for biology as a general and a specialist subject by examining bodies and to give guidance in the production of textbooks and teaching material for use at home and overseas in the teaching of general biology. The Board is extremely representative in its composition, and includes representatives from Government Departments and Institutions, the Universities, Examination Boards and various Educational Organizations. The Board offers certain services to local education authorities, teachers and all engaged in education, such as the recommendation of suitable books, advice regarding syllabuses, the provision of lectures for teachers, etc. A meeting on Biology and the School Curriculum was organized by the Board and held on 1st January, at University College, London. In his very interesting address, Mr. J. W. Stork, Senior Biology Master, Charterhouse, urged the value of a truly educational General Science Course in which biology should take its proper place in relation to physics, chemistry and other sciences. In the discussion which followed, several speakers stressed the importance of relating biology and science directly to everyday life.

Education in West Sussex

We are interested to learn of the great progress which is being made by the West Sussex Education Committee. The County Council have now approved the erection of a new Senior Mixed School in the Lancing district where the population has greatly increased owing to the rapid housing development. This is the third Senior School approved by the County Council during the current year. The Education Committee have also approved of a number of schemes for the improvement and extension of the school buildings of Church Schools and are considering proposals for the reorganization of Elementary Education in Bognor Regis.

Scottish Council for Research in Education

Readers who are familiar with the recent tests issued by the Scottish Council for Research in Education, whose Survey was reviewed in a recent issue of this Magazine, will be interested to know that the tests used in this Survey can now be obtained separately, price ninepence each, published by the University of London Press.

Abbotsholme School, Derbyshire

During December, a very successful luncheon was held by the School Council in London, followed by an afternoon At Home. The guests included Mr. John Drinkwater, Mr. Abbott, C.B.E., of the Board of Education, Mr. Gerald Gould, Dr. Maxwell Garnett, C.B.E., and Prof. V. H. Mottram. In his address, Mr. Colin H. C. Sharp, Headmaster of Abbotsholme, stressed the importance of avoiding a change of school for boys during adolescence. During these years, the boy should be allowed to forget the examination motive and learn to value his achievements for their own sake. There is no need, however, for complaints against examinations...
provided that they are used in their proper place. By postponing entry to the School Certificate examination for one year and organizing earlier studies so that the boy is protected from artificial motives, full adolescent education is proving possible at Abbotsholme without prejudice to later examination successes. Boys are there led to work as adults — not at desperately hated tasks, but through interest closely linked with practical achievement and everyday life. Mr. Sharp also stressed the importance of training the boys to use their leisure well and of aiming at developing a keen all-round man. Lord Lytton said that during his stay at the school, he had come to the conclusion that one of the chief differences between Abbotsholme and other schools lay in the greater interest shown by both staff and boys in the affairs of the outside world. Dr. Albert Mansbridge concluded the proceedings by saying that Abbotsholme preached and practised the very gospel of good education.

Youth Hostels

The Youth Hostels Association of England and Wales has grown from strength to strength and there are now 235 Youth Hostels scattered throughout England and Wales where a good bed and a warm welcome can be obtained from one shilling per night. An appeal is now being made to enable the London Regional Group to build its own hostel in Ashdown Forest. 2d. will purchase a brick, 10s. a door, £1 a window. Small or large donations will be welcomed and should be sent to the Model Hostel Fund, Youth Hostels Association (London), 7 Buckingham Palace Gardens, S.W.1.

Australian Council for Educational Research

We learn from the Monthly News and Notes issued by this Council that many new investigations are to be undertaken. These include an enquiry into the physical and mental condition of school children living under tropical conditions in Central Queensland, an experiment to determine the relative advantages of various methods of presenting subjects to classes of school children, an enquiry into the basis of the ability to spell and the causes of spelling disability, the problem of delinquency, and the reliability of examination forecasts.

Parents' Associations in Mexico

We are glad to learn from the International Bureau of Education that the Ministry of Public Instruction in Mexico has authorized and issued regulations for the Federation of Parents' Associations of the Federal District Unions, and Parents' Associations of elementary and nursery schools. The Secretariat of Public Instruction is willing to aid in the development of these organizations and will endeavour to promote such organizations in districts where none exist. A Parents' Association is to be attached to every public elementary and nursery school, and such Associations will endeavour to contribute to the improvement of the material conditions in the schools and the moral and educational standards of the schools, of course in cooperation with the headmasters or headmistresses. They will not have the right to intervene in the direction or organization of the schools, but they will be allowed to submit proposals and plans through the District Union which may bring them before the Federation of Parents' Associations which acts as a link between the school authorities and the parents.

Nursery School Association of Great Britain

The winter meetings of the Nursery School Association were held at University College, London, in connection with the conferences of Educational Associations and produced valuable discussions on Mental Health, the Consultative Committee's Report on Infant and Nursery Schools, and the Association's own Report on the Nursery School Probationer. Miss Jebb presided at the open conference and Dr. Graham Howe delivered a most illuminating address on The Meaning of Mental Health in which he laid it down that the way of mental health was the way of the education of the whole child, and that the way of the education of the whole child was 'to love and to let be'. He said that it was in the nursery years that the really formative development was proceeding, when the child should be learning to feel right so that we might not be able to teach him to think wrong.

At the annual meeting of members it was reported that, in spite of almost overwhelming difficulties, much useful work had been accomplished during the year. The Association has actively co-operated in the establishment of Emergency Open-air Nurseries in distressed areas; has sent a deputation to the Board of Education; has taken part in the work of the World Federation of Educational Associations, at whose conference Miss Grace Owen read a paper on the Social Significance of Nursery Schools, and of whose Pre-School Section Miss Owen was elected secretary; and has instituted a campaign for the reservation of sites for nursery schools on the new housing estates which are being planned in connection with slum clearance schemes. This campaign received a valuable impetus through the letter, signed by the Archbishop of York, officers of the Association, and others, which appeared in The Times in October and subsequently in the Press, throughout the country. The campaign has aroused considerable interest and cannot fail to have its effect upon education, housing and town planning authorities.

Rapidly increasing activity has given rise to the necessity for a full-time secretary, and the Association has secured the services of Mrs. Phoebe E. Cusden, J.P., of Reading, who has had considerable experience in social and municipal affairs and has devoted much of her time and energy to the problems of the pre-school child.
Book Reviews


Were a course of lectures to be given on contemporary views and personages in American education, the present volume would serve as an excellent text. The writer maintains, indeed, his own preference among the theories presented; but he puts his cards on the table quite frankly and nowhere allows a bias to affect unfairly his presentation of the attitudes of others.

Holding that an educator must be judged against the social background of his day, Mr. Woelfel devotes his first fifty pages to painting this as it actually exists in contemporary America. He shows that the puritan and individualistically minded society which is taken for granted by many writers on education is already in process of passing away, never by any possibility to be resuscitated.

The next hundred pages are devoted to condensed accounts of the educational philosophies of seventeen Americans. These are presented in three groups. Classed as emphasizing chiefly the traditional viewpoint are H. H. Horne, H. C. Morrison, Wm. C. Bagley, E. F. Cubberley, T. H. Briggs and R. L. Finney. As 'stressing the ultimacy of science' are C. H. Judd, David Snedden, E. L. Thorndike, Ernest Horn, W. W. Charters and F. Bobbitt. Finally come men who are variants from the philosophy of 'modern experimental naturalism'—John Dewey, Geo. S. Counts, Wm. H. Kilpatrick, H. Rugg and Boyd H. Hode. These brief sketches form the meatiest part of the book and are scholarly and fair in spite of being concise. The student who wishes to put himself quickly au fait with what his American contemporaries stand for could hardly be referred to a more useful short compendium.

The sixty pages of criticism which follow are more frankly partisan. Mr. Woelfel gives each member of the traditional group a grilling which to me, who share his viewpoint, seems legitimate, but is certainly pitiless. The group stressing the ultimacy of science he is also severe upon—perhaps too much so in the case of Horne, whose program of the child's rights he declares to be 'little more than an expression of the child's right to be docile while the graded school was more benevolent'. The experimental naturalism group meets with more approval. Even these, however, are none of them accepted quite uncritically except Dewey, with Kilpatrick second in favour. Mr. Woelfel surprises us by calling Dewey's philosophy 'an emergent one which few educators have as yet considered seriously'. Otherwise he is fulsome in praise of him.

The author ends his book with a few constructive suggestions. The whole work is condensed without being pedantic. The combination with these qualities of a strongly maintained progressive viewpoint affords us a piece of crisp and stimulating reading.


This volume is a collection of reports submitted to the International Institute of Intellectual Co-operation, in reply to enquiries, by correspondents in Austria, Denmark, Finland, France, Germany, Great Britain, Hungary, Italy, the Netherlands, Norway, Spain and the United States of America regarding foreign travel by primary and secondary school pupils. The reports deal with all the principal forms of travel and exchange at present practised, viz., individual exchanges between families, collective exchanges of pupils at holiday centres, international holiday settlements, international holiday camps, group travelling and excursions, and open-air centres.

As a report of what is being done to make travel in foreign countries available to larger numbers of children, the work is extremely useful; and the bibliography will be of value to those interested to learn in greater detail of the work done in the several countries. But the educator or the psychologist will seek in vain for the 'more than this' which he will naturally expect.

The point in question may be made clear by quoting in full the first paragraph of the introduction: 'Foreign travel has always been regarded as one of the indispensable aids to the training and education of youth. To-day, however, school travel is assigned a new and special role, that of contributing to the rapprochement between nations. It is generally recognized that school children who are sent on visits to foreign countries are given an opportunity not only of improving their knowledge of a foreign language, but also of coming into contact with another civilization and of establishing personal bonds of friendship which will ultimately contribute to a spirit of goodwill and understanding between peoples.' Now of these things referred to in the italicized parts of the statement (the italics are mine) there is no manner of proof whatever in any single report; so that 'general recognition', whatever the term may mean, is ill-founded and premature.

The belief that foreign travel is likely to promote a desire for international co-operation and to lead to intercultural understanding is at best, at the moment, a pious opinion. It seems time, now that so much foreign travel has been carried out by school-children under the direction of enlightened men and women in so many countries, that something should be done to enlist the co-operation of psychologists, who will tell us exactly what has happened to the attitudes of these children. Otherwise we shall go on believing that what we wish to happen really happens; preventing ourselves from attaining our ends because we are working without scientific guidance. 'Intellectual co-operation' must find something better for us than 'general recognition'.

Peyus Hopkins

George H. Green

This is an outspoken book: Mr. Appleton leaves us in no doubt as to his beliefs and values. 'A right understanding of religion will help you to see properly your greatest gift, your ability to adore divine things, lively things, strong things, and in this way to become strong and lively yourself.' Religion is defined as 'the exercise of the adoration of God', and we are told that 'to keep in touch with God is even more delightful than to keep in touch with your home'.

The book shows the gradual evolution of man's comprehension of the divine, beginning with totemism and ending with descriptions of the beliefs of men like Ruskin and Edward Carpenter. Mr. Appleton is extremely skilful in tracing the development of the various important religious conceptions, and pays special attention to the interactions of these upon each other.

There are five sections:

Part I gives the history of religion up to the time of the Incarnation. It describes many early myths—Chinese, Greek, Egyptian and Norse—as well as 'the story of the making of man as told in Southern Israel'. There is an excellent chapter on Greek philosophy, and a good account of the progress of the Jewish nation. 'I want you to see the religion of Israel in its setting beside the other religions of the world.'

Part II describes the life of Christ. Most of it is taken directly from the New Testament, linked with explanatory notes by the author.

Part III summarizes the history of religion from Pentecost to the Reformation, with clear descriptions of the early church and its difficulties and of the establishment of creeds. There are stories of the saints, and a chapter on Mahomed: there are also references to Mithraism and Zoroastrianism.

Part IV gives accounts of the important religious people and movements from the Reformation to the Great War, beginning with Dante and Roger Bacon, taking in Presbyterianism, the Quakers and Christian Science, and ending with a long postscript on Communism and Nazi Germany.

Part V is only some fifty pages, and begins, 'In the earlier sections of this book we have been considering religion and the world in the past, but from here onwards we shall be imagining how you yourself can help to build up a new order of things'. There is a chapter on Prayer, which is very sensitive to the difficulties of the subject, and gives definite and helpful suggestions. The other headings in this section are Making and Doing, Beauty and Truth, and The Coming Kingdom.

Mr. Appleton is honest: he does not attempt to gloss over the atrocities that have been committed in the name of religion, he deplores the Bolshevist ideal but says 'we must give them credit for being consistent' and 'we should avoid thinking of the Bolshevists as licentious people: the strict members have set themselves quite a high code in many respects'. He also deplores the formalism and stiffness of various religious sects, and pleads for the recognition

Wyatt Rawson


Those acquainted with Eduard Lindeman and his books will know the general argument of this volume. Conference in the settlement of conflicts is the only alternative to domination. If democracy is to survive, a proper technique of conferring must be worked out and made available to all. Since a merely intellectual settlement of any conflict is no settlement, discussion must involve the whole personality and bring out the personal experience of each participant. Tolerance is vain, if fundamental disagreements have not been explored and understood. But the most important element in any conference is the Chairman, whose function it is to define the problem clearly at the start, to bring out differences and register agreements, to check repetition and clinch results. He must be keenly interested in what others think, and possess himself an inner serenity. It is for him to foster acquaintanceship by informality. He must arrange for a pause if the debate becomes too hot or the complexity of the problem appears overwhelming, and should see that such a period of silence is used by members for a postponement of judgment and a search for the right perspective. Finally, the Chairman must be a student of opposition, of the inferiority (or frustration) complex; for conference is a test of motive and a time of self-scrutiny. The development of the individual during the discussion is essential if effective group action is to result.

These principles are the most recent contribution of the United States to democratic theory, and constitute a new and vital aspect of it. It is sad, therefore, that their presentation is still wrapped in a curious jargon of generalities, so that their immense importance to the preservation of democratic society has largely been overlooked. Mr. Walser, through his considerable experience of conferences in Europe and America, has had a golden opportunity of rectifying this error. Unfortunately, in The Art of Conference he has largely missed the opportunity.

Two-thirds of the discussion is too confused and rambling, referring at one moment to the problems of big international delegate conferences, and at the next to those of small private study groups, or even of high school class discussions. No doubt there are principles common to all of these; but not to distinguish between them at any point is to make the ordinary reader suspicious of even the most justifiable generalization.

The last part of the book, however, consists of a number of appendices, concerned with a detailed analysis of some ten particular examples of conferences—educational, industrial and international. It is eminently practical, and has given the author an opportunity of making a large number of valuable and instructive points. It is only to be regretted that he does not deal with the problem of such world conferences as those of the New Education Fellowship, which he mentions having attended and upon which his observations would have been of the greatest interest.

Wyatt Rawson
The spirit behind Moody and Sankey's sentimentalism.

The great message of the book is that of hope. Mr. Appleton believes in the ultimate good towards which men are striving, however often they may miss the road. The religious beliefs that wear out their life are of 'death'; which bring new life', and he looks for the coming of this new life after the 'death' period of the Great War. Special stress is laid on the personal responsibility of each individual to do his part in building up the Kingdom of God on earth.

Celandine Kennington

Common-sense Psychology and the Home. Frederick H. Dodd. (Allen & Unwin, 5/-.)

Common-sense Psychology and the Home can be warmly recommended to all who, not possessing knowledge of psychology themselves, nevertheless wish to benefit by its discoveries. From cover to cover the book is full of commonsense and practical help in guiding the child towards the attainment of a well-adjusted personality. It discusses in a simple and straightforward way all the usual difficulties which confront the parent and teacher. The advice given is so rational that it can confidently be followed without violating one's instincts, which can by no means be said of some well meaning writers on modern education.

The subject of the home as the child's early environment is treated with sympathetic understanding. It will come as a relief to those parents who, after reading some books on psychology, are faced with the awful dilemma of choosing between suicide for themselves or an institution for the child.

Throughout the book one feels that the author has admirably achieved his purpose and that the title has been amply justified.

C. A. Raab

Psychology and the New Education. S. L. Pressey. (Harper Bros.)

In Psychology and the New Education Professor Pressey has produced a book most practical and stimulating to all teachers. Those who know but little of the rapid advances recently made in the science of psychology, will have it brought home to them most vividly, through his illuminating examples and graphs. Those who have studied psychology as a science, but have not been trained to study children, will here find help in understanding and in relating their scientific knowledge to life.

The first part of the book treats of the child's development during his school years, and here Professor Pressey has dealt in a most detailed and straightforward way all the usual difficulties which confront the parent and teacher. The advice given is so rational that it can confidently be followed without violating one's instincts, which can by no means be said of some well meaning writers on modern education.

The second part of the book, dealing with actual learning seems at first more commonplace; but on reading further, it is realized that these platitudes are only preparing the way for suggested methods of investigating some of the most difficult and subtle problems in educational research. We feel encouraged and stimulated by the professor's firm confidence that these problems will eventually be solved by research, and that difficulties of adjustment to life can be dealt with by means of education. Surely this is an inspiring and hopeful conclusion, and as such will be of special value to teachers of to-day.

Juliet M. Lyon

Unborn Son. Oliver Baldwin. (Grayson and Grayson, 10s. 6d.)

No one who is easily shocked should read this book. It consists of a series of letters written to the son the author would have liked to bring into the world but felt he dare not, because of the topsy-turviness of the world, and its emphasis on wrong values. The letters range over a variety of subjects—from eugenics to education, from sex to spiritualism, from marriage to music, and from religion to revolt. Mr. Baldwin is still in the thirties and it may be suspected that in this volume he voices the opinions of a large part of the younger generation. It is no answer to his frank discussions of what, after all, are important problems, to say that they were better left alone. Much harm has been done in the past by the suppression of discussion which had it been free and frank could only have resulted in greater understanding and fuller confidence.

Mr. Baldwin has a good deal to say about the public schools, but his criticism only differs from that of many others by his greater emphasis on their failings. It is, however, only fair to say that the public schools, like so many others, and, indeed, like education in general, are at last showing signs of beginning to face realities.

There are several errors of grammar and even of fact in the book; but Mr. Baldwin has an excellent style, and whatever one's opinions may be about the subjects discussed, Unborn Son is a pleasure to read.

A. J. Lynch

School Broadcasting. League of Nations Intellectual Co-operation Series. (George Allen and Unwin, Ltd., 10s. 6d.)

This volume, which is in the nature of a report based on the replies to a questionnaire sent by the Institute of Intellectual Co-operation to the leading countries of the world, consists of two parts.

The second, and by far the larger part, comprises interesting reports supplied by 25 countries of experiments, results and projects. These, of course, vary in treatment and length. That supplied by Great
Britain describes in very fair detail the subjects dealt with in school broadcasts in this country.

The first part deals with the principles of broadcasting. The place of Broadcasting in Primary and Secondary education, the subjects best suited to broadcasting, methods of presentation, and the use to be made of broadcast lessons are a mere indication of the wide nature of the inquiry on which the whole report is based. The report emphasizes the limitations of teaching by wireless as well as the resources which it offers. It recognizes that, in virtue of its very nature, broadcasting cannot be anything more than a subsidiary instrument of education. If it be an essential aim of education to develop the individual faculties of pupils in a gradual process of intellectual training, the personal action of the teacher who may call upon the pupils effectively to participate in his teaching is essential. This is perhaps more true of pupils of primary than of secondary school age, although in both types of schools there are always those who adopt a purely receptive attitude.

But it is no part of this notice to discuss the problem at length. Suffice it to say that the whole subject is very fully dealt with in this report and no student of school broadcasting can do without it.

A. J. Lynch

The Year Book of Education, 1934. Edited by Lord Eustace Percy. (Evans Bros. 35s.)

Most of us who feel the changes, actual and imminent, which the present age forces upon our consciousness, confess to a feeling of bewilderment, and in the sphere of education this feeling is increased as educational problems grow in urgency and complexity with every fresh demand made by the world which education serves. We need, in fact, a survey of what has been attempted in theory and practice for every grade and type of education in every progressive area; and to facilitate our approach to reality, a clear statement of what is being done in the educational world of to-day.

To The Year Book of Education for 1934 we are glad to extend a grateful welcome, because it meets both these needs. Following reviews of the educational systems in being throughout the Empire and United States, with a shorter survey applied to other countries, are fully documented sections dealing with the financial aspect as it affects the United Kingdom, and a succinct but important statement (likewise for the United Kingdom) of the law in relation to schools, parents, and teachers.

Recent events in education throughout the English-speaking areas are elucidated in a series of chapters; and as one of the special features of this 1934 volume, there are eighteen chapters on various aspects of the work being done in secondary schools. These chapters are of more than current importance since they carry on the publishers' plan of providing gradually, along with the Year Books, a series of monographs by competent authorities which will come to constitute a veritable encyclopaedia of education. To illustrate this we may refer to the chapters on the teaching of modern languages, by Mr. H. F. Collins, Headmaster of the Chichester Boys' High School. This is an excellently luminous exposition of a subject which has caused much excited controversy; so handled that advocates of both the 'direct' and the 'traditional' methods may read it with pleasure and profit. Also it is sufficiently concrete to be useful to the student and young teacher. Mr. J. E. Barton (Headmaster of Bristol Grammar School) similarly raises most enticing issues in his essay upon the classics; and lack of space alone precludes reference to items of equal appeal.

Lord Eustace Percy's share in the volume is considerably more than that implied by his position as Editor-in-chief. The greater part of the detailed matter pertaining to England and Wales is from his pen, as well as certain subtle and fascinating chapters on 'Creative Education', inside and outside the schools, which will, we anticipate, give many educationalists food for thought.

A further idea of the scope of the volume may be gathered by the mention of such special topics as 'Religious Education in Scotland', 'French Catholic Schools', and 'Music Teaching in English Elementary Schools'. A note upon educational text-books and the part played by the publisher in shaping them, is of timely import.

We will only mention in conclusion that the usefulness of the volume is completed by tables, graphs and index; and that educationalists who fail to consult its pages will be the losers.

Chetwynd Palmer

The Conflict of Values. J. R. Bellerby. (Richard Clay and Sons and Education Services. 6s. net.)

Professor Bellerby some time ago published a volume entitled A Contributive Society, which depicted the character of the society that would emerge were all men bent on contributing their utmost to the common fund of life values. It described an ideal economic system. The present volume elaborates the theory enunciated in the former volume and deals much more fully with 'The Neighbours' and 'Education Services' which are the instruments with which to forge the new society based on Mr. Bellerby's theory of contribution.

Professor Bellerby's ideals are high indeed, and if not altogether difficult to attain in practice, must certainly be difficult to maintain unless one is imbued with conviction and grim determination. Nevertheless, there is always room for experiments of this kind, especially when they are backed, as this one is, by obvious sincerity. We would recommend this book to the careful consideration of any of our readers—and they must be many—who are gravely concerned about the topsy-turvy world in which they find themselves. Here, at any rate, is a serious and challenging contribution to the thought of our time.
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The New Era in Home and School

Outlook Tower

Educationalists from every corner of the globe will turn their eyes towards South Africa this summer, for it is there, in that young country so full of promise and opportunity, that the Conference on Education will be held during July, a conference offering a unique opportunity to all those who believe that through the education of the people of to-morrow will come the solution of the world’s problems to-day.

In this issue, Dr. E. G. Malherbe, Mr. Rheinallt-Jones, and Mr. Pellissier contribute articles which describe a few of South Africa’s main problems. The thoughtful reader will see for himself that in essential essence they typify those which we are all seeking to solve in one sphere or another.

This gathering of educationalists from all over the world is to sit first in Johannesburg and then in Cape Town and to take the form of a Regional Conference of the New Education Fellowship. The conference has received magnificent support, both financially and morally, from the Union government itself, as well as from about eighty organizations such as the Universities, Education Departments, Teachers’ and Agricultural Associations, Social Work Organizations and so on, who have combined to invite a number of authorities of world-wide eminence to discuss the country’s problems. These are numerous, for nursery schools have not yet developed in the Union, parent education and parent-teacher co-operation is still in its early stages. Changes are needed in the training of teachers, in the examination system, in the organization of the curriculum. The ‘mental goose-step’ must give way to purposeful individual progress. Problems of bi-lingualism must also be discussed, vocational guidance has still to be introduced, and above all the nature of true nationalism and its relation to internationalism must be considered. Such are a few of the topics to engross the attention of those who are fortunate enough to attend the meetings. Each lecturer has been chosen for the particular contribution he is qualified to make to the discussion.

It is particularly significant that the State itself should be willing to accept the good offices of the New Education Fellowship; for it shows the increasing recognition that the Fellowship has gained as an independent body under whose auspices experts from all over the world will gather to play their part in thrashing out these vital problems. As this is a regional conference, it will offer ample opportunity for the free exchange of ideas. The Report which will be issued should be of the utmost value to those educators and social workers who look upon education as a means of building a better type of society; for recently the Fellowship has organized a number of commissions which have undertaken to investigate specific educational problems. It will be one of the aims of the conference to co-ordinate the data they have obtained and to show what steps can be taken to improve present conditions and to safeguard the future for those who will inherit it.

There is indeed reason to congratulate the organizer, Dr. E. G. Malherbe, the able Head of the National Bureau of Education for the Union Government, on the work he has done in connection with the Conference, which promises to be a particularly brilliant one.

Teachers and educationalists who go to South Africa in July will not only have the opportunity of taking part in illuminating and stimulating discussions, but will be offered the hospitality of a country renowned for the magnificent variety of its scenery.
Some of South Africa's Educational and Social Problems

E. G. MALHERBE

South Africa's social, economic and educational problems have been stated in such an unescapable way in the Reports of the Carnegie Commission on the Poor White Question in South Africa and of the Native Economic Commission that the South African people are beginning to realize that something should be done about them. And it is probably because they feel that remedial measures or solutions must in the last instance be educative that they have put as the main theme of the Conference: "The Adaptation of Education to Meet the Rapidly Changing Conditions of Society and Economic Life, with special reference to South Africa."

A point which people from overseas often fail to grasp when they discuss South African questions is that nearly all our social, economic and educational problems are essentially problems of a vast rural community. The focus of the educational problems of this country centres on the rural child. Too often this is forgotten by urban-minded pedagogues. To use patterns which have been worked out for densely populated countries or for urban centres in framing a solution generally fails.

It is in the rural areas that devastating distance proves the undoing of some of the best conceived educational schemes. How are we to give those boys and girls scattered on remote farms an education which will not only prepare them for adequate living in those parts, but also free them from the determinism to which they are subject in such isolation. In cities where there are large schools it is possible to offer diversified courses of study. There the abilities of children can be explored and each trained according to his peculiar bent. Not so in the small rural school miles and miles from anywhere. Centralization is the only solution, it is said—but this is very difficult and very costly. Daily transport is possible only in a few instances.

Hex River Valley, Cape Province

[By Courtesy of S. African Railways and Harbours]
The only alternative is to collect the children in big boarding schools. What becomes in these cases of so-called home training and parental influence? An institutionalized child never really has a chance to achieve a well-balanced emotional and character development. Moreover, this is a very costly proposition, as it is looked upon as the State’s responsibility to feed and house these children if it takes them away from their homes. It undermines incidentally also parental responsibility. When these children come home after having been living in these school hostels (often more than a hundred miles from home) from their 7th to their 16th years, their parents often say: ‘Now that the State has taken our children away from us and has given them an education which makes them useless for us on the farm, the State had better find them jobs also.’ And the kind of job which the parent has in mind is a white-collar job. In the Cape Province there are over a hundred so-called ‘Hostels for Indigent Rural Children’ where the State not only feeds them, but often also clothes them. In the North-West districts nearly a third of the children are in these hostels. They often include non-indigents as well. Some of these schools do excellent work, as was shown in Volume III of the Carnegie Commission’s Report which deals specifically with the educational aspects of South Africa’s problems, but in the case of others one often wonders whether the children would not have been better off had they been left at home.

One of the findings of the above-mentioned report was: ‘The poor white problem owes its origin largely to the inadequate discovery and utilization of our human resources at all levels of society.’ This is particularly true of rural South Africa. That is why we expect such a great deal from the discussions at the Conference on the problems of Vocational Guidance with special reference to the rural community.

H. G. Wells stated a profound truth when he said: ‘I suppose that one could define education
as the lifting of minds out of blind alleys.' Our rural communities have human and intellectual resources of very high quality; for do we not draw from there most of our best brains and leaders in political, social and religious life? Yet it is also true that the poor white problem has its origin on the land. It is largely due to the inadequate adaptation of our rural people in the face of the rapid economic transition which took place in South Africa during the last fifty years. The school is also to blame, chiefly because it has been such a poor prophylactic measure—moving as it did in a world all by itself and unconcerned with the grim realities of the life of the people whom it was supposed to serve.

One of the startling facts brought to light by the above-mentioned report was that 58 per cent of the boys who proceed to make a living as farmers on the land have left school before passing Standard VI. (This is the last standard of the primary school which pupils usually reach at an age of about 14½ years, having started school at 7.) Moreover 95 per cent of them have had no ad hoc training in agriculture. The farming population has therefore to raise its level of general education considerably, and to be trained more adequately in the science and practice of agriculture.

People here have not yet adequately realized that, with a world market to compete in, the use of modern and 'rationalized' methods of production is essential also in agriculture. In South Africa particularly, farming is such a difficult and exacting enterprise that no man can afford to undertake it unless he has had the best possible training. Our farming population has often been acclaimed as the backbone of our nation. If that is so, our nation will soon deteriorate into an organism of the jelly fish variety unless a radical improvement is brought about in the educational equipment of the people on the land.

As the British Association found in 1929, when it visited South Africa with about 600 overseas delegates, South Africa is a country with a peculiar interest as a meeting place for the discussion of such social and economic questions. It is a new country, simply bristling with problems, and the issues (which are really world issues) stick out more clearly than in the older countries, where they are often over run and obscured by the complexities of Western civilization. As an experimental station and laboratory in racial and cultural relations, South Africa is almost unique in the world to-day. A small white population of less than two millions, situated at the tip of a vast continent of 140 millions of a black people, is entrusted with the task of bearing the torch of European civilization. Moreover, there is also a clash of culture between the two white races of English and Dutch descent, each clinging tenaciously to its own cultural distinctiveness. In the Union of South Africa alone the ratio of black to white people is about 4 to 1, and the question arises: what is the future of these blacks?

Must they be taught to develop their own indigenous culture—arts and crafts—or must they forget these as soon as possible and imbibe European civilization? In the first case, the black man will regard such efforts with suspicion, because he thinks that the white man is foisting something inferior upon him. There is no getting away from it, the black man wants the white man's education. He wants, particularly, the white man's school subjects, like Latin and Science, etc.; these seem to him the magic charms which have given the white man power and which make him great. If the second alternative is adopted, namely to Europeanize the black man as soon as possible, one has to face a very dangerous period during which the tribal sanctions are being broken down and the European social and moral sanctions have not yet become an ingrained disposition in the native's mental make-up. If this cultural question were all, the task of South Africa, difficult as it is, would not have been so formidable, but the whole question is also complicated by almost insuperable economic problems, such as the questions of land tenure and of economic competition between white and black. The native has a much lower standard of living, consequently his competition with the white man, in an open labour market, gives him an advantage. These factors have created in the mind of the white man fear complexes which prevent him thinking clearly on these questions.
The Teaching of English Literature

HUGH LYON

The other day one of my Classical Staff pleaded passionately for more Latin, which he described in glowing terms, and to the unconscious delight of his colleagues, as the Cinderella of the curriculum. This, to my mind, marks an epoch. I have, I think, heard every other possible and impossible subject, from Greek to Biology, cast by its upholders in the role of Cinderella. Now at last we all start fair, and the super-Cinderella, by which of course I mean English Literature, has a chance to show how much better she fits the part than the rest of them.

English Literature—A Luxury

If any of you were, like myself, so depraved as to start life with a governess, will you cast your minds back and try and recollect how the emphasis was laid? There was a language, be it Latin or French; and there was Arithmetic. And these two, being so strange and so difficult, always loomed largest in the time-table. Even if your governess was intelligent enough to treat English as almost, if not quite, on a par with these, nearly all her attentions were devoted to the twin sisters 'History' and 'Geography,' ruling, the one over time, the other over space, one compact of kings and dates and campaigns, the other a sea of names and lists and diagrams. Sister number three, poor little 'Prosody,' had to crouch in the corner of the hearth and be content with occasional snippets of Shakespeare and a rapidly memorized and thumpingly declaimed description of how Assyrians came down like a wolf on the fold. And even in these enlightened days, when History has shaken off her fetters, and Geography, after setting her own house in order, is stretching out hands to Economics and Natural Science, even now Literature is hard put to it to keep a worthy place in the subject called 'English'. For we have discovered that the result of taking for granted that all more or less educated Englishmen can speak and write and understand their own language without special training to do so has been disastrous; that it passes the wit of the average public school product to write a clear, grammatical and reasoned summary or description of the simplest operation, whether that be finding a way in the dark or boiling an egg; that employers tear their hair over the spelling and writing and phraseology of their clerks; and that the great British public can be misled by a calculated confusion of similar but not identical expressions as thoroughly and as frequently as any Press Lord could desire. And so the cry has gone forth that at all costs we must teach the English people to use and recognize their own language in their everyday life before we begin to suggest that it has other uses. Few reforms are of course more urgently necessary than the creation of a clear-speaking, plain-writing and logical-minded English people. But the means have often been ill-chosen; and the old superstition that everything that goes by the title of 'literature' is a luxury, has marked down this branch of English for neglect, to the benefit of précis, aids to spelling, and lists of synonyms and antonyms.

The result of postponing the teaching of English literature till the pupil is fully able to use his language and understand it with some degree of fluency and accuracy would clearly be this. First, that boys who leave school at fourteen would get no introduction to literature at all; and this means either that they would never read for pleasure, or that they would succumb readily to an appetite for sensational and trivial reading-matter. Secondly, that boys who stay longer at school would probably be plunged without introduction into the intensive study of Shakespeare or Bacon or Chaucer or Milton for the School Certificate, and would accordingly look on these authors with loathing for ever after. But the upholders of the method are not only prejudicing literary education; they are robbing themselves of one of the most potent aids to that knowledge and use of good English at which they aim; for the imitative instinct is powerfully at work among twelve-year-olds, and they will swiftly set themselves to do less badly what they
find the authors they read doing so well.

I am not going to insult you by discussing the virtues of my Cinderella; but however well we may ourselves recognize her royal quality, it is none too easy to pass on that knowledge: the wand which is to make the transformation must be wielded with a skill which far surpasses the routine work of turning mice into horses and pumpkins into carriages. It is ticklish work, for a false pass at a critical moment (be it a piece of bluff or insincerity or an ill-judged sneer, or merely an editor's note) may ruin the spell for ever.

There seems to me little to be said about the earliest stages of literary education: most children solve the problem for themselves by demanding and devouring immense quantities of the pabulum which for the moment they desire. This is not the stage for careful direction, selection and restriction. The reading of a young child is directed by his interests, which in most cases are healthy and manifold. Of course there is something we can do with all children, and much we can do with some. Just as many children have to be lured or even tricked into trying new foods, and some have to be coaxed to eat at all, so we can be continually at work trying out one thing and another; inconspicuously (a most important qualification that) introducing books of different kinds or greater difficulty. Many children love being read to, yet are soon bored by reading to themselves: none can resist a story which is—or seems to be—spun straight out of the teller's brain. To the bookish child the free run of a good library, to the indolent reader a patient initiator into the mysteries—these are the main essentials.

The Child—A Traveller in Two Worlds

And so to school, where the feeding process goes on, with more deliberate choice of diet, and with the first demand for some return from the reader—original work, reproduction, even the beginnings of appreciation. Two appetites soon appear, closely related yet requiring different satisfaction. What the child clamours for is enlarged experience: looking out and not in, demanding fresh sensations to be swallowed and not deliberately savoured, he travels at large in two worlds. One is the world of daily life, but immeasurably enriched by tales of adventure, exploration, piracy on the high seas; from these drab walls to desert islands or untrdden snows; from the protected routine of civilized child to the outlaw, the pioneer, the knight at tourney. So he would make his escape, and the literature of centuries of tellers of tales false or true is there to aid and abet him; and so this world of ours stretches out illimitable in space and time—yet it remains this world, and as such it has no monopoly; for literature outsoars the physical experience of man, and speaks, with a voice which to most of us, alas! becomes ever less clear and less certain, of another world, a world of which the child is by right divine a citizen, that Heaven which lies about him in his infancy. Of old he lived at ease there with witches and giants, elves and fairies; and now, just so far as his genius is a kindly one, so far is he willing and able to stray there still, even if without the old surrender and the old content, striving, perhaps a little desperately, to remain at home in a world where the impossible usually happens; yet through his uneasiness half conscious of a deeper reality than his wanderings in the earth of history can ever give him. But of this he needs constant reassurance, and it is just here that some fairy godmother should first wave her wand. We have no right to stand aside and suffer the shades of the prison-house to spread unchecked over the whole territory of the imagination. Wordsworth divined with unusual penetration the passion to make himself at home in the world which so rapidly overwhelms a child, the passion which inspires him with uncanny skill in recognizing different brands of automobiles. He cannot know the value of what he throws away; we must somehow show him it is valuable. His whole instinct is to escape from the limitations of childhood, and among those limitations is the necessity of working at tasks set him. We have to show him that imaginative literature is in itself an escape; and if it is one for us we need do no more than reveal the fact, and his imitative instinct will do the rest.

The Onslaught of Materialism

There is, I believe, a real crisis in the lives of
most children, a time when materialism makes a determined onslaught upon their imagination. If we knew just when it was coming we could be prepared for it; but we don’t. It may be at any age from 7 to 12, or even later. So no artifices will save us; only some divine chance may guide us, or our own allegiance to the unseen world help others besides ourselves. This crisis comes roughly at the time when a boy ceases altogether to believe in the shadowy world into which literature guides him. Either then he forswears it altogether, or he learns to find fresh delight there, accepting now as symbols, as intimations of immortality (irreplaceable phrase!) what were to his childhood as real as the Court of Elizabeth. Hazardous passage from realism to idealism! For where is the magician who can link Alice’s White Rabbit and the incomparable Piglet with the creatures of the waving forests of de la Mare and Prospero’s enchanted island? Happy the boy who passes unscathed from one world to the other, and all honour to the fairy godmother who mutters the incantation.

And so we receive him into his public school; and there he will find two or three periods in every week devoted to the study of English Literature. Every boy will approach that study with a differing outlook; the unlucky ones with a foretaste of boredom or at best a hope for relaxation; the more fortunate with something of the spirit of adventure which some wise teacher has taught them to be associated with all fresh literary experience. Now what should we be giving him in his English hours in this first year or two?

The Ideal English Course

First of all, he should of course get much that is not literature at all, though it will be unobtrusively inserted into the period. He should learn to write and spell a little less vilely, from a new growth of self-respect. He should write a very little very often, and so learn to shape phrases and use punctuation and put simple thoughts into words. He should have occasionally to get up and talk for five minutes on end, whether it be to give a summary of a story just read or to describe a climb up a hill or to take part in a debate. He should in due course write his contribution to the form magazine. But all this is subsidiary to, though skilfully combined with, the main purpose of these hours, which is to continue his literary education. How should this be progressing?

The main book at this stage might well be an anthology, a hotch-potch of prose and verse, narrative, descriptive, imaginative; no extract too long for a single period, none too difficult to need annotation. Side by side with this there should be a succession of books, of the Buchan or Stevenson type, read partly in and partly out of school. But the anthology is the main thing. It should be well printed and attractive to look at; and though its contents may range from Defoe to Barrie and from Chaucer to Bridges, there should be nothing which is not of its kind excellent.

This then is the instrument: how is it to be used? In an ideal education, the master would be himself not altogether illiterate nor insensible to beauty. His reading would increase and not spoil the effect of a lyric, add vigour to a tale of hardihood and breadth to a landscape. He would vary his treatment, knowing that a period spent upon the first appearance of Friday in ‘Robinson Crusoe’ should be as different as possible from one which is devoted to ‘The Forsaken Merman’. But certain things he must be for ever striving to attain—to keep his own comment down to a minimum and extract the maximum from his boys: to let them discover beauty (by his adroit guidance, perhaps) rather than to drag it out into the open himself: to urge them again and again to live the poem as he reads it, to hear the ‘angel’s flute’ in ‘The Ancient Mariner’, and the slumberous music which hung about the Lotus-eaters, to catch the gleam of a sword or a distant waterfall, to follow every gesture of Captain Oates staggering out of Scott’s tent into the snow.

Questions at this stage should all be concerned with the poem or story itself: no pinning down of allusions, no notes (oh horror!) to be learnt by heart, no dates, no tabloid biographies. Much of this emerges as the extract is discussed, but it should not be a burden upon memory nor an easy method of compiling marks. To have a preparation for such lessons is a doubtful boon: it is a sore temptation to the master with more
conscientiousness than literary conscience. The lesson should begin with the extract chosen read aloud by the master. Then ten minutes of general criticism from individuals. Did they like it? Why? Why not? What especially? Here those who have completely missed the point can be shown the track, and if there are many of these a second reading may be needed. Then come the special criticisms, usually more deliberately fished for. Why did he put this and not that? What does he mean by this curious phrase or that unlikely adjective?

And the object of all this? That boys should approach the more serious and difficult period of their literary education with a prejudice for and not against the great writers; with an expectation of enjoyment and not dread of a difficult and complex task. If this could be insured, then the School Certificate Syllabus would not be the killing thing it so often is to-day.

Preserving the Love of Literature in Boyhood

Yet here again we must of course have a competent fairy godmother. A mangled treatment of ‘Lycidas’ or ‘Macbeth’ will not spoil literature for a boy who is past the danger-point; but it may easily spoil for him ‘Lycidas’ or ‘Macbeth’; and he should not be robbed of any of his inheritance. But it is not only because the bungler can here do a little harm that I invoke at this stage a fresh waving of the wand; but because it is just at this impressionable time of adolescence that the skilled teacher can do incredible good. Remember that the love of literature is fighting all the time in the growing boy with a wealth of other interests— with the joy in his growing physical powers and the inevitable games-worship which comes with it; with the material interests of home and school; worst of all, with the torrent of worthless but momentarily exciting reading-matter which is all too readily available. Indiscriminate reading to the boy of 15 or 16 is often a curse: reading becomes a mere drug, a refuge against boredom, a passing of the time. Or it is a diet of ever fresh and ever more violent sensations, which are indulged in until the taste is vitiated beyond repair. Something can be done to direct and control reading: the quality of school and house libraries matters immensely, as does the attitude to literature of those adults with whom boys come most into contact. But a wise teacher of a School Certificate form can do most of all.

First, there are the ‘classics’, which have to be faced fairly and squarely and mastered thoroughly. Everything depends upon the way of approach. There are in effect three stages in the intensive study of any classic. First, the preliminary reading, directed simply to secure the first impressions of beauty or power which the work produces upon intelligent newcomers. There must be nothing of the task about this; simply the appreciation of a work of art. Then comes the longer secondary process, one of analysis and detailed study; again, not as a task, but as an attempt to fathom the mystery of the work of creation. This is a dangerous operation, which may grow tedious; but given worthy material and a good operator it should be of unfailing interest. Then, at the end, there should always be the final stage. We have seen a poem or a play or a book as a whole, and studied it in detail. Now we must get at arm’s length again and see it as a whole once more: if we do not find it all the more beautiful, then the second process has been woefully mismanaged.

But literature should not be confined to two or three pièces de resistance: it should be presented as a country demanding individual exploration. Readings, long or short, from modern prose or poetry are a powerful incentive. Book-lending is a valuable spur to budding literary taste, though often expensive to the lender. But whatever the means, the principle remains—to treat literature as a delight, and the great works of art as masterpieces which the closest study should make all the more delightful.

Literature and the Age of Reason

And so we pass from the first Public Examination to the Age of Reason. And the age of reason, while usually very willing to follow learning for profit or information, has to be persuaded, for it can no more be cajoled, that there is a literature of another sort, a literature to be followed and loved and enjoyed for its own sake, for spiritual and not material gain, for knowledge—not of the world of nature or the world of science, but of the soul of man.
March-April 1934

In this literature, poetry at once offers the highest rewards and demands the sternest endeavour. How far at sixteen has a boy progressed in poetical knowledge, and what still lies before him?

Children, we saw, live in two worlds, real and unreal. Books to them are windows from which they look out, not mirrors wherein they see themselves reflected. The poems of action are supreme in this first stage, these and the fairy lifts which please at once by their powerful sense of rhythm and their escape from the world of every day. It is from the lyrical side that the main developments are to come. The child finds that besides telling a story poetry can express his own quite simple feelings. He will like poems in certain moods because they sound sad or jolly or defiant—all this without introspection or analysis. And just at the time when the material world makes its assault upon the imagination, he comes to realize, if he is fortunate, that the material is not supreme. His normal life may seem devoted to the things of the world, but down the byways of poetry he can escape at will. And as he enters upon the stresses and dreams of adolescence, his eyes turn more and more inward, and even in their outward gazing are searching and penetrating ever below the surface, until he tumbles upon the knowledge which all along was waiting for him in his excursions into the world of the imagination, the knowledge that what really matters is not what happens to the bodies of men, but what happens to their souls; not eating or fighting, getting rich or bald or fat, winning a fortune or killing your enemies, but grief, joy, fear, courage, love, envy, happiness. And with the discovery comes wealth untold; for now all the ages lie open to him. Not only to his own feelings does poetry give the key, but to the experience of all humanity. The boy who is historically cut off from the Thane of Cawdor and the drowning of Milton’s friend King, can, by the genius of poetry, feel the ambitions and fears and despairs of Macbeth as if they were his own, and catch the under-tones of sorrow which sob and swell through the splendid music of ‘Lycidas’.

Literature and Life

So he comes into the Age of Reason, with this new knowledge fighting for recognition, for nourishment, in a crowd of hostile impulses. To this realization (for, however obscured, it is there) must we appeal if we are to make literature a part of his life.

We shall find a ready response: the objective and subjective stages of poetic appreciation have in turn passed, and now he, whose eyes in childhood looked with innocent eagerness out upon the world, and later explored with wonder and fear his inner emotions, looks round with fuller knowledge upon humanity whose pulse keeps time with his own, and a universe whose beauties and terrors are but symbols of a deeper reality. This is the time for the great Romantics—Shelley for the dreamer, Wordsworth for the thoughtful, Coleridge for the artist, Keats for them all. And for every poem we read with them let us make sure that they read two for themselves: let them spend three weeks on a thesis on a poet or a period of which they at first knew nothing: let them ponder a couple of isolated and anonymous poems for a fortnight, and then write at length their judgment upon them. Let them challenge our own verdicts and uphold their likes or dislikes in the teeth of criticism. And let them write sonnets and blank verse till they despair of their own incompetence and turn with more reverent admiration to the masters whose casiness is so deceptive.

I follow a well-worn track, and there is nothing new in this recital of the routine literature work of a Sixth Form. I do but retell it at the end of this tedious brief essay to assert my belief in it. The quicksands of specialism spread further every year and threaten to absorb the whole being of their victims. If the narrowing of curriculum is not to mean narrowness of mind there must be a compensating broadening of interests in the last two years of school life. But there are few surer ways of quickening sympathy and developing interest than through literature, few studies which will enlarge experience so widely and so wisely, and none which can to the end of life speak so steadily of beauty and courage and the quiet mind, calling in, to redress the balance of this world, the inexhaustible treasures of the kingdom of the spirit of man.
Examinations
LAURIN ZILLIACUS

The essay stands at one pole of examination method, the standardized test at the other. An essay is like the first impression of a new face. It may be an effective means of securing a rapid general sketch of the mentality behind the outward expression, a sketch which includes elusive personal qualities that evade any standardized test yet invented. In France, where the essay is accorded the place of honour among examination techniques, the examiner is expected to have ‘a flair’ and to be equipped ‘not merely with intelligence, but with intellectual sympathy’; he must be ‘prepared to give the right of way to those (candidates) who have tact’.* Judgments based on essays, however, share the drawbacks of first impressions: they are subjective. The mark awarded for an essay is essentially nothing but a measure of the rapport between the writer’s and the judge’s minds. Where a teacher has to choose his future disciples from among a large number of aspirants and wishes to select minds that are in harmony with his own, the essay may therefore be recommended. When an examiner has to choose disciples for others, it is another matter. The larger and more impersonal the examination system, the more diverse the activities for which it is to admit or reject candidates, the less adequate the essay becomes. Where the essay fails, the standardized test steps in. Specific qualities are in general measurable. Does the candidate possess a specified body of knowledge, or a specified ability, to a specified degree? As soon as the question is thrown into this form, a test can be devised with the single purpose of supplying the answer.

The Standardized Test
The very limitation of aim enables the test to be exact and ‘unequivocal’ in its pronouncement. The standardized test is gaining ground in many countries. In America it is being applied over an ever-increasing range of examination territory.

* M. Bougélé, at the first Carnegie Conference on Examinations (Eastbourne, 1931).

The Present Confusion—The examinations that at present besride our school systems are a veritable hodge-podge, a mixture of various ‘essay’ factors with different types of tests, any one of which taken alone could be standardized but which, fused together, put the examiner in the position of trying to solve several unknowns with one equation. Take a history or a science paper of the usual kind: the candidate in answering will have to draw on his ability to express his ideas in writing; on his store of memorized knowledge of facts and opinions (he is allowed no reference literature such as any grown-up with a sense of responsibility would use when writing a paper); on his understanding of the meaning of this body of knowledge as exemplified in his ability to draw obvious inferences and make easy applications; on his higher reasoning powers as shown in his ability to make more difficult deductions or inductions; on his luck in finding among the narrowly limited battery of arbitrarily chosen questions some that he has happened to study with particular thoroughness; on his power of remaining level-headed under nervous strain or a combination of this power with mere examination habit; and, lastly, too often on his physical endurance, and even, at times, his ability to interpret ambiguously phrased questions. The examiner sees the joint product of all these and other factors, and calls it 63 per cent in Inorganic Chemistry or English History—or, if the candidate is less fortunate, 33 per cent.

It is small wonder that doubts have arisen as to the scientific validity of such a system. Examination bodies in most countries are august and singularly unapproachable. Nevertheless, during the last few years a number of investigations of their work has been carried out. Experienced examiners of essays, of history, Latin, mathematics and modern languages, have had their systems of marking evaluated, generally by the method of comparing their marks with those given by other examiners for the same work. The results—at least those that have been published—indicate that there is a wide
Unreliability of Examinations

range of variation in the marks assigned even by examiners working within the same institution. In the marking of essays the range is wide enough to fulfil at times the Biblical prophecy 'the first shall be last and the last first'; but even in other subjects bad failures and good passes change places with bewildering ease. When one considers that this distressing uncertainty arises in judging the finished product of the examinee, and that this product itself gives a most uncertain picture of its maker, a picture influenced by arbitrary and irrelevant factors, then we can rejoice with Ballard when he notes that although the old type of examination does not yet seem to have been called in question in some countries, in England it is already under suspicion and in America has been definitely put under arrest.

Mention should here be made of the particular unreliability of the usual examination at the lower stages in school life (e.g. the entrance examination to secondary schools). All who have in any measure studied the question seem agreed that the examination hazards increase as we move down the age scale and that, as Professor Valentine has demonstrated, the prognostic value decreases until at eleven plus it has reached vanishing point.

Our criticism of examinations has as yet only been concerned with their failure to live up to their own claims. The essential criticism is, however, on another plane. Throughout the length and breadth of the civilized world—indeed even among the backward people on whom we have pressed our blessings—examinations have become the master, not the servant, of education. On the Continent of Europe, with its rigidly centralized State school systems, the domination of the examination is absolute. The State prescribes the curriculum to the last cast-iron detail and sets up an examination system definitely and avowedly as a control. The teachers in their turn definitely and avowedly teach what is required for the examination. It is difficult to express in words the consequent havoc wrought among educational values. Regard for the person of the child, for his all-round growth, for his urge to become a social being, an artist, a healthy organism, all this has no examination value, and is therefore neglected. Not even intellectual growth, nor indeed the very acquisition of knowledge, is held in honour: knowledge itself is prostituted to the examination mark. Whatever is easiest to assess in an examination gradually fills, nay, becomes, the course of studies. In languages this means all too easily simply grammar and the ability to translate correctly, in composition the mere mechanics of the art, in 'content' subjects, strings of unrelated facts. Whatever is difficult to measure comes gradually to be regarded not merely as unnecessary, but as inimical to examination success, e.g. in composition most of the elements that give a work of art its value, in languages 'at-homeness' in the language and understanding of the literature and society it represents, in 'content' subjects the ability to think in terms of the subject. In fairness it must be said that the examinations of the English and Welsh School Certificate examining bodies appear to be less reprehensible in this respect than their compeers in the frozen North. Yet not even they can wholly escape the accusation that the convenience of the examiner's foot-rule has come to decide the nature of the product it is set to measure.

Viewed from across the Channel, the English school system appears as a promised land of freedom. A Continental schoolmaster finds it astounding enough to learn that no detailed courses are laid down by State Authorities for the English schools to follow; but that there is not even a compulsory list of 'subjects' seems to him well-nigh incredible. Add to this that the State does not impose or indeed run any examination system, and the golden vision is complete. Yet we have so incontrovertible an authority as Sir Philip Hartog saying that 'from the very bottom, or almost from the bottom, of the educational scale to the top, education is at the present moment in England very largely controlled by examinations'. Hartog's statement is amply confirmed even by a casual glance at the English educational press, or the resolutions of English educational conferences, or simply by conversation with English teachers. It seems a curious anomaly that the school in a great country should be granted freedom by the State only to lose it to private examining bodies.
The curriculum appears to be nearly as 'set' as that of the State-ridden Continental schools—nearly, but not quite. The difference is important and points to one of the avenues of escape.

The examiner has been allowed to play ducks and drakes with education because the teacher has not known his own mind. A fundamental confusion as to purpose reigns in the realm of secondary education. Shall the school aim at all-round education, taking regard for the individual and the claims of society as paramount; or shall it seek to lay the foundations for higher studies, taking the claims of the university as paramount? In theory, the answer has generally been: both. The practice, however, has been to entrust the curriculum to subject specialists, who have had things very much their own way, limited only by internal disagreement as to how to divide the booty. The fact that the curriculum has from time to time been augmented as a result of the more vociferous claims of other parties does not invalidate this description—it has simply meant additions to the burden the white man has handed on to the white, and often to the black or yellow, child. Exaggerating somewhat for the sake of making the main point clear, we may say that the subject specialist's view of the curriculum is upside down: taking the sum total of knowledge (a vast total) and of performance (a more modest amount) considered necessary in his subject for the label of Bachelor or Magister, he shakes it out like the toy known as Jacob's ladder, assigning the top rungs to the university, the middle to the secondary school, and the lowest to the primary, while between them he turns the examiner loose. The other specialists do the same, and so you have the child regarded as a gradually increasing fraction of a professor in each branch of study, doomed to swallow (with or without cramming), and at stated times to regurgitate for inspection, these logically perfect but psychologically indigestible gobbets of erudition.

There is a legitimate function for the examination, and there are useful forms of tests. The legitimate function is not that of a control from outside—which will always tend to impoverish the product it is intended to guarantee—but that of a tool in the hands of the teacher and the taught. The useful form is that of specific tests as part of a comprehensive system of analysis and record-keeping, tests fashioned to follow the work done and not to predetermine it.

It is along these two lines—the evolution of scientifically valid tests and the relegation of the examination to its rightful place in education—that reform seems to be coming. We find both happily combined in the work of the Educational Records Bureau of New York. A number of schools have here joined forces to take examining into their own hands: the Bureau established by them has as its sole function to evolve tests and methods of record-keeping that will give the clearest and most useful picture possible of the development of every child in the constituent schools and to help each teacher to analyse his or her work more effectively. It is an experiment that will be watched with interest by the educational world.

Many other attempts are being made to move along one or both of these main lines of reform.
No one who is interested in education and wishes to be well informed can afford to ignore this standard work, the articles of which will be quoted and referred to wherever the many problems of education are being discussed. Administrators, journalists, politicians, and students will regard this book as an indispensable addition to their reference libraries, since it represents the greatest and most authoritative attempt ever made to survey every aspect of education in every part of the world.

"EDUCATION" says:—"Every University, Training College, and Library should have these Volumes on their bookshelves. They should be made available for every student of Education. Members of Education Committees really interested in their jobs should make time to examine these pages, and Chief Education Officers will find in a readable and convenient form a mass of useful and accurate information. We congratulate Lord Eustace on his "Third YEAR BOOK."

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The direction of making the school record count for more and giving the teachers a greater say in the marking and even to some extent in the setting of the questions. This well-marked tendency is by no means confined to Sweden. In its extreme form it leads to the abolition of examinations conducted by persons outside of the individual school. In Belgium and Estonia, e.g., matriculation is gained from an approved secondary school without examination. The system does not appear to meet with unqualified support, particularly from new school circles. The reason is that ‘approval’ necessitates strict adherence all through to a rigidly defined curriculum. In the U.S.A. the matter has been more satisfactorily arranged by private action. A group of schools has secured agreement with the majority of the larger universities to make the experiment of admitting applicants on the recommendation of the school and the school record. A liaison committee has been formed, and all the implications of the experiment are being worked out and followed. These schools are not bound to a narrow course of studies; on the contrary, the main purpose of the experiment is to try the value of a curriculum for life as a foundation for university work.

Another step towards examination reform is that of allowing greater freedom of choice among subjects and of admitting new subjects that have not previously counted. Elasticity. The School Certificate in England and Wales and recent Swedish legislation afford examples of cautious progress along this line. Appreciative mention should here be made of the willingness of the English School Certificate examining bodies to accept alternative syllabuses from individual schools. The fact that this breach in the examination wall has not been more widely used is presumably evidence that it is more difficult to build up a syllabus than to criticize examinations.

The English School Certificate presents another feature that is of interest: the possibility of obtaining a certificate that does not admit the holder to any of the universities. In the recent report of the investigators appointed by the Secondary Schools Examinations Council it is even proposed to divorce the examination entirely from university entrance considerations. The School Certificate would thus become solely a school-leaving examination and entrance to a university would always necessitate at least one additional year of specialized study and a new examination. If this reform were carried through, one might well hope—indeed demand—that the subject specialist’s view should no longer be allowed to dominate the secondary school, and that the leaving examination be designed solely to serve as a tool in the service of the school. With a ‘life-centred’ secondary school in place of the present ‘subject-centred,’ the need would no longer exist for separation into different schools under different roofs at the beginning of the secondary stage. The pressure on the primary school would be eased and the way opened for the only reform generally regarded as adequate in the present selective, competitive entrance examination at eleven plus; i.e. abolition. It may be added that much the same reform has been advocated in the press in Finland, and is at present before the Swedish Parliament in the form of a private Member’s Bill.

Oppressive examinations and rigid curricula are a children’s disease of mass education. They are the attempt of society to obtain a guaranteed produce in the face of large numbers and a huge machine. But you cannot play for safety in education. Every advance is here gained by the creative acts of free individuals. Every way out of the present impasse leads in some measure to a loosening of the bonds, to experiment and therefore uncertainty, to elasticity and therefore variation, to trust and therefore risk. A vast factory turning out standardized goods may with advantage be highly centralized and have minutely specified functions and controls for its different departments. An educational system can be managed in the same way; if it is, it can even be made to a considerable extent failure-proof and fool-proof in turning out a product that comes up to certain minimum specifications; but that product will not be homo sapiens.

The first report of the International Examinations Inquiry Commission of the N.E.F., of which Rektor Zilliacus is Chairman, will be published in April, price is.
The Native Problem in South Africa

J. D. RHEINALT-JONES

Educational workers coming to South Africa for the Regional Conference in July will find there several educational problems having their origin in the rapidly changing social and economic conditions of life.

There are four main racial groups in the Union—the Whites (13½ millions), Bantu (5 millions), Coloured, i.e. Mixed (600,000) and Indian (190,000). The Indians are mostly in Natal, only 22,000 being in the Transvaal and Cape of Good Hope Provinces. The Coloured are mainly in the Cape, about 70,000 being distributed throughout the other Provinces. The Bantu and Whites are to be found in all the Provinces.

The Boer War may be said to have marked the end of those migrations, such as the Great Trek, whereby White and Bantu communities sought to ease political and economic pressure. There is now no area of the Union free to such migrations. Every part of Union territory is owned by someone—White farmer, Native tribe or individual farmer, Indian cultivator or the Crown. Free occupation of land has ceased.

In addition the occupation of land as between Whites and Bantu is now closely regulated under legislation, purchase and sale of land being prohibited except where specifically authorized by the Governor-General. To-day the Native Reserves comprise 13 per cent of the area of the Union, the land in Government and White ownership being 85 per cent.

There is a Bantu saying ‘Man begets but land does not’. While the position regarding land ownership is almost static, the population is not. The White population increases at just under 2 per cent per annum, the Bantu by 1.6 per cent. Since the Bantu population is more than three times as great as the European, while the Native Reserves are more than six times less in area than the European-owned areas, it will be realized that the population problem in Native areas would have been an exceedingly acute one if all the Natives had been in the Reserves. Actually, nearly half of the Natives live in European areas as tenant farmers (paying cash-rent or giving their own and their families’ labour in return for the right to cultivate a strip of land), or as servants. Even so the pressure on the Reserves is enormous. In the Transkei over 50 per cent of the males between 18 and 60 are away at any one time augmenting the income of the Reserves, where the average agricultural production is not enough to maintain the population, pay taxes, buy clothes, agricultural implements, etc.

In other areas the outflow is as high as 70 per cent. There is a constant stream in and out of the Reserves, with an increasing tendency for the Natives to remain permanently out of the Native areas.

There have been other factors at work besides increase of population to account for the movement of Natives out of the Reserves. From the opening of the diamond fields in the eighteen-sixties labour recruiters have been active in persuading Natives to enter the White man’s employ. In 1894 Rhodes included in some beneficent legislation a tax on Natives to press them out of the Reserves to work for the White man, but the tax was soon found unnecessary for the purpose. Nevertheless the Native to-day pays a heavier tax than ever. Every Reserve Native between 18 and 60 pays from £1. 10s. to £2. 10s. per annum in direct taxation. In addition in many Reserves the Natives pay tribal levies of £2 or even more, as well as secret tribute to the Chiefs. The pressure of recruiters and taxation on Natives to leave the Reserves is very considerable.

But perhaps most of all is the pressure of new social ambitions. The to and fro traffic between the Reserves and the European towns consists not only of the workers. Each individual carries back to the Reserve tokens of the new world, some of the fruits of the White man’s civilization; clothes, bicycles, gramophones, sewing machines, etc. These make an appeal to the women as well as to the men, and they too find their way into the towns. Often they follow men-folk who have remained in the towns,
sometimes they run away from the control of parents and chiefs, and not infrequently they go, intending to remain away for a period only, to earn money for the education of younger members of the family. At any rate, the Native female population in the towns increased by 50 per cent between 1911 and 1921.

In the towns, some 300,000 male Bantu are now to be found, housed in compounds on mines and industrial concerns. Three hundred thousand Bantu men, women and children are to be found in the slums, in municipally built townships and in private employ. In the towns there is a medley of new associations. Men with families in the Reserves or on farms develop new families in the towns: married women find new husbands and bring up new families. Old traditions have gone and life is rudderless.

In the Reserves, on the farms, in the towns, all is confusion and change. The Native agrarian organization is inadequate to provide the Reserves with the satisfactions for which they crave. The conditions on the White man’s farms are too unfavourable to persuade the Native agricultural worker to resist the calls of the town. The living conditions and the wages in the towns are not good enough to provide decent healthy family life there. While the Reserves cannot maintain their populations, the Natives are being driven back there from the towns to make room in industry for the White poor, who are also suffering from the operation of very much the same social and economic forces. Agrarian organization, both in the Reserves and in European areas, is faced with a vast problem of readjustment—the transition from a subsistence economy to a money economy. Only 5 per cent of the land held by Whites is cultivated, because of the nature of the soil, the lack of an evenly distributed rainfall and the traditional methods of farming. But with increasing population and, particularly, with the rapidly increasing social needs of the people, the future of agriculture in European areas is full of dangers. Similarly in Native Reserves, the great problem is their adjustment to new social and economic conditions. How can the people be helped to develop a civilized life in such adverse circumstances of inadequate and under-cultivated land, over-populated with cattle, which are objects of veneration and the measure of wealth?

Perplexing and vast as the problem of economic adjustment is among the Bantu, the most profound of the problems is that of mental and moral adjustment. The Native is thrust into a new world, a world where the old conceptions of the universe and his relationship to it, the traditional religious ideas and moral sanctions, the venerated tribal leaders and organization, all appear to be inapplicable; where the whole pattern of his thinking and mode of life is utterly inadequate and incongruous. No wonder that he is bewildered and overwhelmed. While he gladly takes up the tools of civilization as playthings he cannot see what relation they have to his thinking. He tends to accept new ideas as necessary for his protection in a strange milieu without making them part of himself.

What part does Education play in this complex situation? Native Education has a history of nearly 100 years of devoted missionary endeavour, at first without Government grants and even now with wholly inadequate support. Necessarily, the educational ideas and methods used have been those brought over from Europe and America by the missionaries. Of experimenting there has been little because the resources—in men, money and equipment—have never been sufficient. The results have been in many respects remarkable, and South Africa owes a great debt to the missionary forces for the solid worth of their educational work.

There is nothing to suggest that the Bantu cannot profit fully from the most advanced educational opportunities. The record shows that where Bantu pupils remain long enough in school and college, they do creditable work on European standards.

But when one turns to consider the influence of Education on the masses one is made to wonder whether the ordinary educational methods are suitable or adequate. Seventy-eight per cent of Native children of school age are not in school. Of the remaining 22 per cent more than 50 per cent are in Standard I and below. Most of them remain in school for a few months only, and many of the schools in the Reserves have but one or two teachers. How far
can education in such circumstances make an impression on the masses? In what way does the school serve as an agency for the adjustment of the child to the new world into which the Bantu are being thrust? These are questions which must be faced at the coming Conference.

Whatever may be our view of the value of the education now available to the Native child, there seems to be little doubt in the minds of his parents. Never has there been such a demand for the admission of children into Native schools. The Union spends to-day in Native Education twice the amount she did ten years ago, but the schools are overcrowded, 1,500 schools are without grants, and thousands of children are clamouring for admission.

Why is this? To the Native, education is power—not only power to earn a livelihood, but the source of that power which makes the White man master of his fate. For this reason, the Education to be given must not differ from what the White man's child receives. More than this. There is no necessary connection between Education and the life of the tribe. Education is for use in an European milieu, and it need have no relation to tribal ways of life, to traditional forms of cultivation, for which the traditional 'specifics' ought to suffice. Natives who have been able to remain in school or college long enough, appreciate, in varying degrees, the function of the civilized ideas of the school in enabling the masses to adopt civilized ways of thought and conduct (although only a few days ago I was informed that an experienced teacher I know had been to consult a witch doctor). As a matter of fact, there is to-day widespread bewilderment as to the relation of these new ideas to the institutions and modes of thought in tribal life. The gulf between the school and the community is wide and apparently unbridgeable at the moment.

The task of the educational worker in Africa is a far greater one than that which faces his colleague in Europe and America, where for the most part, the school reflects the ethos of the surrounding community. In Africa, the school is a foreigner—a welcome one, but still a foreigner. How can it become the wise, sympathetic and understanding interpreter of a new order and at the same time help the old order to merge itself in the new with the least amount of disturbance and disorder? The child comes into the school with ideas of the universe and its phenomena, and with moral sanctions quite opposed to those inculcated in the school. Too often the conflict ends in the child becoming contemptuous of all that is best in tribal life and separating himself from his people. How can the school harmonize the old and the new?

These are some of the questions which will be raised at the Conference. How will they be answered?

Mr. J. H. Thomas writes to the Overseas Education League:

Dear Sir,

I have learnt with great pleasure that the Overseas Education League has organized a visit by United Kingdom and Canadian Teachers to the South African Education Conference of the New Education Fellowship which is to be held in the Union of South Africa this summer.

I always welcome activities which have as their object the promotion of better knowledge and understanding among various parts of the British Commonwealth of Nations, and I am glad to have this opportunity of testifying to the work which has been done by the Overseas Education League in enabling teachers and students to visit other parts of the Commonwealth.

I am sure that those taking part in the coming visit to the Union of South Africa will have a very warm welcome there, and I wish them all a successful and enjoyable tour.

Yours faithfully,

(Signed) J. H. THOMAS.
Progress of Education under Provincial Administrations in South Africa

S. H. PELLISSIER

An article contributed to The Year Book of Education for 1934 deprecates the fact that at Union in 1910 primary and secondary education was handed over to the Provincial Administrations. I, however, definitely and without any hesitation hold just the opposite view. I consider the action on the part of the National Convention in respect of education—although I am prepared to admit that at that time it did constitute a compromise—was the salvation of education in South Africa, and that education thereby escaped being thrust into a second, third or fourth rate position in a new Union which had to solve so many difficult and intricate problems of a very contentious nature. In my mind there is not the slightest doubt that if all education had come under Union control in 1910, it would not have reached its present high level: the conditions of service for teachers would have been weaker, the problem of rural education would not so successfully have been solved, nor would the language medium question, which would have been the football of party politics for one or two decades under Union control.

Let me amplify the points just mentioned. Prior to Union in 1910, primary education was fairly well developed in the Colonies of Natal and the Cape of Good Hope, but on a very conservative basis. In the bigger centres in these two Colonies, facilities for secondary education existed. In the Transvaal and the Orange Free State, however, the aftermath of the Anglo-Boer War had not properly been cleared away. Outside the two capitals of these Colonies and outside Johannesburg, there were hardly any secondary schools. Rural education was practically unorganized. The school buildings which existed were totally insufficient to accommodate the rapidly increasing number of children of school-going age who desired admission. In the villages and towns the majority of school buildings had to be erected de novo because so many had been destroyed during the war, while during the ten years that came after the outbreak of the war, other pre-war buildings had become too small and their grounds in the centre of rapidly growing towns so cramped that it was advisable to build on new and more spacious sites outside the outskirts. In the Orange Free State every town school building which is in use today, with the exception of one block in a certain town, has been built since the Anglo-Boer War of 1899–1902.

Immediately after the war South Africa experienced an abnormally high birth rate. These children, who had reached the school-going age by 1910, and those whose education had been neglected during the war, swamped the existing schools, and the public clamoured for more school buildings. Teachers’ salaries were on a very low level and pension funds did not exist except in the Cape Province, where one of a very primitive nature and with an unsound financial foundation was in force. Certificated teachers were scarce and persons with a little secondary education were readily accepted. In rural areas, where farms were many miles apart, it was a tremendous task to establish schools; apart from the difficulty of obtaining teachers, it was very unsafe to erect school buildings in these areas where the school population was constantly shifting. The problem was immediately attacked by the newly-formed Provincial Councils, to whom the care of education (other than higher), roads and hospitals had been assigned as their chief function. They immediately gave most of their attention to education, as there was then little demand for good roads, and only a very small system of hospitalization in the country.

These newly-elected provincial bodies, therefore, tackled the great task of building up a new system of education in each Province. The financial relations between the Provinces and the Union were such that the Union Treasury supplied 50 per cent of the expenditure of each Province on condition that the annual increase in expenditure did not
March-April 1934 PROGRESS OF EDUCATION IN SOUTH AFRICA 89

The shortage of trained teachers resulted in higher scales of salaries being offered by the Transvaal and the Orange Free State, the two Provinces which could then not yet train a sufficient number of teachers for their own use. The Cape Province, which had the two largest University Colleges for supplying secondary teachers and the largest number of training colleges for primary teachers, lost many newly-trained teachers and some experienced ones to the Northern Provinces, while Natal imported many teachers from the United Kingdom. As a result the Cape Province was forced to improve the conditions of service of teachers, and a general levelling up of salaries and pension schemes in the four Provinces took place. If, on the other hand, the Union had controlled education from 1910, the low Cape standard would probably have been adopted as a basis for Union scales of salaries. To my mind, a satisfactory scale of salaries and a reasonable staffing basis are the two most important factors in the building up of a sound system of education, as far as the material side of the question is concerned. The Provinces laid this good foundation. The Union could not and would not have done it.

In addition to these advantages, there is now diversity where uniformity would have been the order of the day. Apart from the Matriculation Examination of the Joint Matriculation Board and the Joint Certificate Examination of the University of South Africa, the Transvaal and the Cape have their own Junior and Senior Certificate Examinations, and the Orange Free State its own Junior Certificate Examination. Although the corresponding Examinations are of the same standard, the curricula and choice of subjects are different. To my mind, this is ideal, as each Province accentuates something different—the Transvaal, the school record and oral tests; the Cape, the standardization of examination results in the different subjects; and the Orange Free State, the time factor. Each Province, too, has its own Primary School Code. I shudder when I try to visualize a central Matriculation Examination with more than six thousand candidates, and a central Junior Certificate Examination with more than twelve thousand. In such a central Examination, school records and oral tests would not be possible, and any progressive changes would be difficult to make, as the support of all parts of the country would be necessary before they could be carried out.

The Provinces have had a free hand to develop their own systems for twenty-four years. Let us now examine to what extent there is co-ordination, how far the children of the nation have been provided with adequate education facilities, and to what extent the systems are sound.

In the Transvaal, education is compulsory for all European children between the ages of seven and sixteen, with the proviso that after Standard VIII scholars who are not yet 16 years old may leave school. In the other three Provinces the age limits are the same as those of the Transvaal, but after Standard VI the side-door is opened for those who wish to leave before they have attained the upper age limit. The tendency in these Provinces is, however, to raise the educational standard from Standard VI to Standard VIII, as soon as their financial positions permit. In the Orange Free State a draft Ordinance for this purpose was prepared in 1930, but it had to be shelved on account of the depression.

From these facts it is clear that education is compulsory in South Africa to a higher degree than in most civilized countries of the world.

In all four Provinces the primary course consists of eight divisions—two sub-standards and six ordinary standards—and the secondary course of four standards. As already pointed out, the Joint Matriculation Board supervises the final examinations of all the Provinces, and in this way maintains an approximately even standard at the school-leaving stage. The Junior Certificate Examinations, which take place in the different Provinces at the Standard VIII stage, are also of approximately the same standard, although the syllabuses and the compulsory subjects are different. It is, therefore, possible for a scholar to change over to schools in different Provinces.
several times during his school career without suffering seriously. I am prepared to admit that inconvenience and expense are sometimes caused; but, to my mind, the interests of the majority of scholars, who do not change over from one Province to another, should be the first consideration. A uniform system would be very convenient for the children of the Civil Servant who is frequently transferred, but would be fatal to the interests of the country as a whole, as uniformity leads to conservatism, which takes a long time to move forward.

The Authorities in all four Provinces declare that they are satisfied that all pupils of school-going age in their respective Provinces are either at school or only temporarily out of it through change of domicile. If the fact that the rural areas of the Union are very sparsely populated and that farms are usually very far apart is taken into consideration, it must be admitted that the Provincial Administrations have achieved much in a short time. In 1932 the total school population of the Union—those who attend the primary and secondary schools of the Provincial Administrations—amounted to 19.2 per cent of the total European population. This is a great achievement for such a thinly populated country, and compares very favourably with that of any other country. The Union covers 466,000 square miles and its European population is only 1,889,000. This amounts to four persons per square mile.

Since 1910 secondary education has advanced with leaps and bounds. In 1932 there were 40,538 secondary pupils in the four Provinces. This amounts to 11.5 per cent of the total school population. Because there are eight classes in the primary school and only four in the secondary, the highest percentage of the total school population which can possibly be in the secondary department is thirty-three and one-third. As there are actually 11.5 per cent it means that one out of every three pupils ultimately follows a secondary course. The pupils in the vocational schools of the Union Education Department are not included in this calculation, although the majority of them are

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**TO SOUTH AFRICA**

**FOR THE NEW EDUCATION CONFERENCE**

**CAPETOWN, JULY 2-13 • JOHANNESBURG, JULY 16-27**

**MINIMUM RETURN FARES TO CAPETOWN**

<table>
<thead>
<tr>
<th></th>
<th>By Mail Vessels carrying First, Second and Third Class Passengers.</th>
<th>By Mail Vessels carrying First and Third Class Passengers only.</th>
<th>By Intermediate Vessels carrying First and Third Class Passengers only.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST CLASS</strong></td>
<td>£118 : 16 : 0</td>
<td>£84 : 12 : 0</td>
<td>£75 : 12 : 0</td>
</tr>
<tr>
<td><strong>SECOND CLASS</strong></td>
<td>£ 84 : 12 : 0</td>
<td><strong>FIRST CLASS</strong></td>
<td><strong>FIRST CLASS</strong></td>
</tr>
<tr>
<td><strong>THIRD CLASS</strong></td>
<td>£ 43 : 4 : 0</td>
<td><strong>THIRD CLASS</strong></td>
<td><strong>THIRD CLASS</strong></td>
</tr>
</tbody>
</table>

The above fares subject to 15% rebate in the case of bona fide delegates to the Conference.

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also receiving a form of secondary education. For a country with such a scattered population, this, too, is a great achievement.

The average percentage attendance for the four Provinces is approximately 93. It is higher than that of any country in the world, in spite of the fact that in very few other countries such a high percentage of the primary pupils attend rural schools where long distances from the homes to the schools and back have to be covered every school day. In the Union, about 40 per cent of the primary pupils attend rural schools, situated on farms.

No unqualified teachers are taken into the service of the Provincial Administrations.

The Teacher's Position

About 97 per cent of all the teachers are professionally qualified. The minimum qualification recognized is matriculation, plus two years' training in a Training College for primary teachers, and a degree plus a professional training of at least one year at a University for secondary teachers. Private study for professional certificates is not allowed in any Province. Recently only the best applicants have been admitted into the training colleges, as the number is at present usually far in excess of that required. The few unqualified teachers in the service, who were admitted many years ago, will eventually drop out, and then it is hoped that there will be a hundred per cent qualified staff. Security of tenure is always a very important factor for drawing capable men and women to the teaching profession, and this is assured to every teacher in the service of the Provincial Administrations. After a year of probation the appointment is made permanent, and a breaking of the contract can only be effected when misconduct of a serious nature is proved.

Next to security of tenure comes adequate salaries and adequate social recognition. It is, however, always difficult to state whether a salary scale is adequate or not. The salaries paid by the Provincial Administrations to their teachers are better than those paid by the Union Government to the teachers in the vocational schools, and compare, as far as I am aware, very favourably with those of European countries with some standing in respect of education.

As regards adequate social recognition, as far as the inland parts of the Union are concerned, teachers are as a rule very much in evidence in social circles, especially in rural areas.

Compared with older countries, the average staffing basis for primary and secondary schools in the Union is liberal. The average size of primary classes would be hardly more than 30 pupils per teacher in town schools, and considerably less in rural schools, while that of secondary classes would be about 25. The buildings erected by the Provincial Administrations are as a rule very substantial and suitable.

It is therefore clear that during the 24 years since Union the Provincial Administrations have succeeded in providing ample and adequate educational facilities and that a good foundation has been laid.

With sufficient schools, good buildings, qualified and contented teachers, classes of reasonable size and with all the children who fall with the compulsory limits, at school, the system of education of a country can still be a failure if the parents and the general public do not take an interest in it and if the teachers are not enthusiastic and eager to acquire and apply the best and most progressive methods of teaching. In these respects there are still defects, but there is also much to be grateful for. In three of the Provinces whose School Committees and School Boards assist with the government of schools, the general public does take a reasonable amount of interest in education. In many cases, large sums of money have been collected for the purpose of establishing funds out of which indigent children could be assisted. Educational conferences are well attended by parents, and the teachers of the four Provinces are organized by seven Teachers Associations, each of which holds an annual conference. The seven Teachers Associations are all affiliated to the Federal Council of Teachers' Associations, which tries to further the interests of education as a whole in the Union. During the last twenty years these Associations have done much to bring about educational reforms.

Education and the Public

The examination system, which has taken root so firmly in South Africa, causing routine work and cramming in
our schools, has been consistently condemned by many teachers in the Associations, and I think I can claim that the disappearance of individual inspection of pupils by School Inspectors with a view to promotion is mainly due to the efforts of our teachers. To their efforts also can be ascribed abolition of homework in the lower standards, revision of the codes and syllabuses and improvement of conditions of service for teachers.

Education in the Union of South Africa has now passed through its first stage. In the second stage the main task will be to build on the foundations which have been laid, and to make provision, amongst others, for the following:

(a) Better facilities for medical inspection and provision for a system of treatment of pupils with physical defects.

(b) A general periodic mental survey of all school children, with a view to providing special instruction for mentally defective and backward children, and supplying vocational guidance to the normal ones.

(c) Better provision for the training of teachers in subjects like art, singing, physical culture, manual work, elocution, etc., and insistence on greater prominence for these subjects in the school curriculum.

(d) The elimination of examinations as far as possible and the reformation of those which cannot be dispensed with.

(e) A better relation between the rural school and its environment by the adoption of an agricultural bias to the curriculum.

(f) Better equipped libraries and the use of the cinema in the school.

In conclusion, I sincerely hope that the conference held under the auspices of the New Education Fellowship will be a source of inspiration to the country as a whole, and that all the individuals, bodies and administrations working in the interests of the child in our country, will be imbued with the new spirit in education.

Some Statistics Concerning the Union of South Africa

The area of the Union is approximately equal to the combined area of France, Germany, Holland, Belgium, England and Wales.


<table>
<thead>
<tr>
<th>Provinces</th>
<th>Area in square Miles</th>
<th>European</th>
<th>Non-European</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape</td>
<td>276,966</td>
<td>758,000</td>
<td>2,405,700</td>
<td>3,163,700</td>
</tr>
<tr>
<td>Natal</td>
<td>35,284</td>
<td>181,300</td>
<td>1,539,700</td>
<td>1,721,000</td>
</tr>
<tr>
<td>Transvaal</td>
<td>110,450</td>
<td>714,100</td>
<td>1,890,500</td>
<td>2,604,600</td>
</tr>
<tr>
<td>Orange Free State</td>
<td>49,647</td>
<td>206,000</td>
<td>555,600</td>
<td>761,600</td>
</tr>
<tr>
<td><strong>Total: Union</strong></td>
<td><strong>472,347</strong></td>
<td><strong>1,859,400</strong></td>
<td><strong>6,391,500</strong></td>
<td><strong>8,250,900</strong></td>
</tr>
</tbody>
</table>

The area of the Union is approximately equal to the combined area of France, Germany, Holland, Belgium, England and Wales.

(A) Enrolment.

State and State-Aided.

(a) Primary and Secondary Education in Union.

<table>
<thead>
<tr>
<th>Number of Schools</th>
<th>European</th>
<th>Non-European</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>4,870</td>
<td>10,168</td>
<td>25,911</td>
</tr>
<tr>
<td>Pupils</td>
<td>15,743</td>
<td>403,400</td>
<td>763,427</td>
</tr>
</tbody>
</table>

(b) Technical, Vocational and Agricultural Education.

| Number of Students in European Technical Colleges | 17,500 |
| Trade, Industrial and Agricultural Schools       | 4,000  |

Continuation Classes: 1,600

Special Schools for Deaf and Blind: 417
March-April 1934

STATISTICS CONCERNING UNION OF SOUTH AFRICA

(c) Training and Normal Colleges for Teachers.

Number of Students, European 2,106 [The European students are all post-matriculation.]

Non-European 4,500

(d) University Students.

European 7,314 [of which 5,721 are full-time].

Bantu 137

South Africa has 1 full-time University student in every 325 of its European population. In England the ratio is 1 in 1,100, in Germany 1 in 620, and in Scotland 1 in 450.

(B) STATE EXPENDITURE.

(a) Primary and Secondary Education.

<table>
<thead>
<tr>
<th></th>
<th>European</th>
<th>Non-European</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£6,416,371</td>
<td>£1,17,220</td>
<td>£7,533,591</td>
</tr>
</tbody>
</table>

Per head of European Population £3.451

" " non-European 0.174

Total 913

(b) State Grants to Universities, Technical Vocational, Industrial, etc., Institutions.

£914,762.

The Government of South Africa devotes about 25 per cent of its total national expenditure to Education—a greater proportion than in almost any other country.

(C) PRIVATE SCHOOLS.

<table>
<thead>
<tr>
<th></th>
<th>European</th>
<th>Non-European</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>317</td>
<td>607</td>
<td>926</td>
</tr>
<tr>
<td>Pupils</td>
<td>21,611</td>
<td>25,153</td>
<td>46,764</td>
</tr>
</tbody>
</table>

Private Schools are mostly of a denominational character. Religious instruction is, however, given in all State and State-Aided Schools.

THE GROWTH OF STATE AND STATE-AIDED EDUCATION IN SOUTH AFRICA SINCE UNION.

<table>
<thead>
<tr>
<th></th>
<th>European Population</th>
<th>Non-European Population</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911-12</td>
<td>179,000</td>
<td>317</td>
<td>14 per cent</td>
</tr>
<tr>
<td>1915-16</td>
<td>232,200</td>
<td>607</td>
<td>16.8 &quot;</td>
</tr>
<tr>
<td>1920-21</td>
<td>308,900</td>
<td>21,611</td>
<td>20.6 &quot;</td>
</tr>
<tr>
<td>1925-26</td>
<td>347,200</td>
<td>25,153</td>
<td>21.2 &quot;</td>
</tr>
<tr>
<td>1931-32</td>
<td>398,800</td>
<td>46,764</td>
<td>21.4 &quot;</td>
</tr>
</tbody>
</table>

STATE EXPENDITURE ON EDUCATION.

<table>
<thead>
<tr>
<th></th>
<th>European</th>
<th>Non-European</th>
<th>Total (Eur. only.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911-12</td>
<td>£1,850,000</td>
<td>£260,000 (est.)</td>
<td>£2,110,000</td>
</tr>
<tr>
<td>1915-16</td>
<td>2,240,000</td>
<td>538,000</td>
<td>2,778,000</td>
</tr>
<tr>
<td>1920-21</td>
<td>6,144,000</td>
<td>726,000</td>
<td>6,870,000</td>
</tr>
<tr>
<td>1925-26</td>
<td>7,274,000</td>
<td>1,120,000</td>
<td>8,404,000</td>
</tr>
<tr>
<td>1932-33 (approx.)</td>
<td>8,888,000</td>
<td></td>
<td>8,888,000</td>
</tr>
</tbody>
</table>

CLIMATE.

Although the Union of South Africa is situated between the fairly low latitudes of 22° and 35° S., its climate is colder than that met with in similar latitudes in the Northern hemisphere. In point of fact, the various parts of the sub-continent have a mean annual temperature corresponding to that found in Europe seven to ten degrees farther from the Equator. The physical conformation of the country is that of an elevated tableland, 40 per cent of which lies over 4,000 feet above sea-level, bordered by a narrow fertile strip of coast-belt. Climatic changes, on the whole, are gradual, and of a remarkably equable character. Expressed in detail, there is a variety of climates, depending, of course, upon the situation. These range from temperate to subtropical. The percentage of sunshine is high, and on the high veldt the yearly total is on an average 720 hours higher than that of the French Riviera.

TEMPERATURE (average).

<table>
<thead>
<tr>
<th></th>
<th>Capetown</th>
<th>Johannesburg</th>
<th>Mean Daily Hours of Sunshine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum</td>
<td>70-3° F.</td>
<td>71-0° F.</td>
<td>Capetown 7.5 hours</td>
</tr>
<tr>
<td>Minimum</td>
<td>53-6° F.</td>
<td>50-2° F.</td>
<td>Johannesburg 8.7 &quot;</td>
</tr>
<tr>
<td>Mean</td>
<td>62-0° F.</td>
<td>60-7° F.</td>
<td>London 3.8 &quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New York 6.9 &quot;</td>
<td></td>
</tr>
</tbody>
</table>
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South Africa Comes of Age Hofmeyr and others (Masken Miller)
Carnegie Commiss-

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Changes in American Family Life

ERNEST R. GROVES

The social life of the United States is at the moment in a state of ferment. Close contact with any of the social institutions shows the bubbling that indicates the spreading of new life. The evidence of the working of the leaven is, of course, not confined to the United States: wherever modern civilization seeps in, there is evidence of this feast of social change. Some tendencies the United States shares with other nations, and these apparently are being brought about by machine culture with such force as to sweep aside any influences of national origin. Others distinctly show a nationalistic colouring. There is a widespread conviction in the United States, shared by nearly all thoughtful people, that this change is especially evident in family life. This means something different from the gradual evolution which has been going on from the beginning of our colonial settlement. It is felt that although the change is partly the result of the kind of life brought by modern industry, it is shaped by national influences and has features that distinguish it from the reconstruction of family life in other countries. This is a peculiarity which appears to attract the attention of our foreign visitors as well as our own students of the family.

This common belief that family life is changing is something new in our history, and it is interesting in itself as an expression of public opinion; but the moment we ask 'What changes are taking place in the American family?' we find no such unanimity of opinion. It is impossible to discover just what is happening, and all except the dogmatist are forced therefore to speak cautiously of the present trends, at least in so far as they are of fundamental significance. Doubtless the main stream of change is already established; but there are so many innumerable currents that we must wait until the social flood has subsided before we can be sure of the deeper meaning of the present family situation.

Early Influences on the American Family

Even now, however, there are some tendencies, the outcome of modern culture and the American family background, that seem to show the general direction of the new development. No one can understand the American family unless he realizes to the full that it was built upon an historic composite in which English tradition all but completely dominated. The significance of the English common law, not only as the basis of American jurisprudence but as a fundamental influence on the family as an institution, is but a single example of this English tradition which permeated the American family at the beginning. Upon this foundation have gradually been built characteristics of native origin, the most distinctive of which, leading to the emergence of a family life different from that anywhere else in the world, have come chiefly out of the west.

In the early days of colonization, the frontier appeared as a fringe on the outskirts of the compact communities that clung to the shoreline. The men, and later the men and women, who broke from the more closely settled area and entered the freer and more mobile life of the wilderness, were separated from the shore-line influence as these in turn were separated from that of the motherland; and as the frontier pressed onward, this independence persisted. As border settlements were added to the more densely populated territory, cultural trends born of the frontier experience and handed on by contact and tradition were not lost but incorporated as the composite of American culture. Much has been made of the political influence of the frontier, but a more important contribution was its effect upon the family. The permanent occupation of the western territory required a well-knit, self-reliant family, and it was within this domestic organization that the effects of distance from the cultural base-line showed themselves most.

Although this family life was never either self-contained or absolutely divorced from English tradition or from the influences of intermittent contact with the cities and towns of the east, it was forced to adapt itself to the conditions of its new habitat, and in doing this it gave characteristic shape to the American
family. The most important changes now taking place are related to these early original trends over which the west rather than the east had dominance. These traits need to be defined, for only thus can we get a clue to the meaning of the present development.

Three Main Characteristics

The first of these characteristics is a tendency toward the lifting of woman’s status as compared with that of man’s, both socially and politically. Although a by-product of modern culture, it has been greatly accelerated by the freer frontier life of the west, where living conditions tended to foster it. The traditions that maintained masculine dominance weakened as they were carried with the population movement westward. This showed itself first in the greater social opportunity given to women, which soon led to more nearly equal educational advantages and eventually to legal and political equality. Unquestionably the scarcity of women in the thinly settled communities gave momentum to this widening of woman’s sphere; but chiefly it came from the necessity of allowing women a freer and more responsible role in the family enterprise, since only so was survival possible. This dissolving of masculine authority over the family has been viewed with alarm by critics, both American and European, and it has also been hailed by others as one of America’s chief contributions to social progress, but nearly all observers of family life in the United States have recognized it as of major importance.

Another much discussed characteristic has been the great freedom allowed American children and the policy of most American parents that has led to a lessening of family discipline and an increase in the amount of self-expression allowed the child in the home. In theory, at least, the public schools have followed the same programme.

A third trait which seems characteristic of American family life has been the increasing emphasis laid upon personal satisfaction and love-response as the cohesion of marriage, a lessening of the feeling of obligation as the support of family or marriage relationship, and a hostility to the idea of marrying for a financial or any other ulterior motive.

Further Developments

The new developments are intimately connected with each of these three trends. In relation to the first we have a lessening of the importance of the family. In recent years many social organizations, indeed almost social institutions, have grown up, and are taking over responsibilities which formerly belonged to the family. This has been especially emphasized in the study made by the Committee on Social Trends at the request of President Hoover. This tendency is of course not exclusively found in American society, but here it has been decidedly influenced by the advance women have made in their encroachment on man’s privileges. It is not merely that the family has lost activities that once belonged to it, but that in addition many people have come to discount its social values and its importance for them as individuals; while women have felt the conflicting pull of career, wifehood and family responsibilities. So much has already happened that it can safely be said that the family is being influenced by loss of functions and a lessening of social prestige. Yet undoubtedly along with this many parents and children have found an enrichment of a family experience that has decreased in quantity but increased in quality.

Another change that can be detected may be described as a greater tension. The more democratic family fellowship invites collisions not only between husband and wife but between child and parent. Just as self-expression reaches its height in adolescence, so, in consequence, the greatest disturbance one now notices in the inner life of the American family comes from the difference in attitude and outlook upon life of the parent and the adolescent child. Even when there is no decrease of loyalty there is often considerable conflict of purpose and the breaking out of incompatibility. Families differ in the amount of tension that develops, but this feature must undoubtedly be included among the recent changes in American family life. It does not seem, as many suppose, to be a result of mistakes made by the individual parent in the bringing up of the child so much as it is the product of a social atmosphere and living conditions to-day. Often those families which have resisted this trend and have
maintained strict discipline during the childhood of their offspring suffer as much, or even more, directly the children reach adolescence and take over a self-direction which apparently cannot be denied whatever the domestic programme.

The third, and most significant of all the changes, is not so easily described. It can best be defined, perhaps, as the attempt to maintain the family on a pleasure basis, and the test of its success is the reaction of those belonging to the family. In the past the family was recognized both as an ethical obligation and a social and political necessity, and far less than at present as the result of a personal inclination. But although the family remains a social institution, the point of view of its members is no longer social, as far as the individual home is concerned, but personal. The family is expected to bring, as proof of its efficacy, satisfaction to husband, wife and child.

The introduction of the family and marriage into the pleasure programme has led many people to restrict the responsibilities of the home and to take advantage of the present opportunities of ‘farming them out’. This necessarily has been most true of the wealthy and professional classes, but there is no evidence that, given the same chance, other types of families would not follow the same policy. Summer camps and private schools are being used to carry out what just a few years ago was rarely attempted.

Another influence of the pleasure programme has been the unwillingness of many married men and women to assume parenthood, and the use of contraceptive knowledge instead, not merely to limit the size of the family, but to prevent parenthood altogether. The falling birth-rate indicates that many people are adopting what the sociologist designated ‘companionate marriage’ until that term through misuse became a popular synonym for ‘trial marriage’.

In a less degree the pleasure programme is bringing about a new attitude towards marriage itself. This can best be described as an experimental disposition towards it, which takes several forms. The common element is the belief that any commitment in marriage
should be conditioned upon the success of the union, and those who share this view when they legally marry (and most of them do marry), keep in mind the possibility of escape through divorce if life together brings to either any considerable disappointment. This is something new in American matrimonial philosophy, however, and is still a minority reaction.

The Significance of the Family To-day

The immediate results of the depression have been the lessening in momentum of this pleasure programme and the reassumption by many families of former responsibilities. There has also been a strengthening of family loyalty and a deepening of the meaning of family experience. Recent economic stress, however, has also encouraged one of the three major trends in the development of American family life—the experience of the last three hard years will undoubtedly affect the birth-rate, not only in the immediate future but for some years to come.

Along with these changes in domestic experience has developed an increasing conviction in this country that the family must in the future depend for its support more upon intelligent preparation and less upon social routine and tradition. Instruction in preparation for the responsibilities of family and parenthood is being provided by churches, schools, colleges and other educational organizations. Domestic clinics for the giving of advice to those married and those about to get married are already established in several of the larger cities. Courses dealing with marriage problems along the lines advocated by Herbert Spencer are even offered now by a few American colleges and universities. The course on marriage that has been given during the last six years at the University of North Carolina for the senior men was the first of these in the United States, possibly the first anywhere in the world.

There are those who are insistent that the family in America is necessarily losing its meaning because it has lost some of its former activities. The increase in the number of restaurants and cafes is regarded as evidence that the family is losing strength. Undoubtedly it has surrendered enterprises which it formerly carried on as a productive economic unit of society; but these have now no essential significance for the family as an inter-relation of persons, however necessary they may once have been. Indeed, it would seem that the family becomes the better prepared to offer the satisfactions of fellowship by its limitation of extraneous activities, since doubtless in the past it has been held back from its high service to human nature because it has been loaded down with many responsibilities that can now better be met by commercial organizations. As it lessens its importance as an economic organization, the family grows all the more valuable by taking over increasingly as its chief purpose the stimulating and fulfilling of affection.

PRINCIPAL OF SCHOOLS
PARENTS AND GUARDIANS
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Education in the U.S.S.R.

R. KHARITONOVA

EDUCATION in the U.S.S.R. has been planned and built to meet the needs and ideas of the Russian people who, after centuries of political and social repression, have arisen at last to a new and creative life. More than a hundred nationalities populate this tremendous country, and they have all been involved in the great socialist reconstruction of national life. All of them are striving for knowledge and seeking higher standards of culture.

A Proletarian Education

The system of education is closely correlated with economic and social life. In character it is essentially proletarian, and it is dependent upon and determined by the chief problem with which the nation is confronted—the creation of a new social order which shall provide the entire working population with a high standard of living and of culture. Therefore school subjects and the methods by which they are taught, the atmosphere and environment in which the children learn, are all directed towards one end—that of enabling the new generation of boys and girls to take a practical part in this work of reconstruction when they leave school.

Education in the U.S.S.R. caters for the needs of all citizens from the smallest infant to the adult workers and peasants who are fired by a new enthusiasm for learning. More than 70 per cent of the adult population in Russia before the Revolution was illiterate and had no chance of acquiring even an elementary knowledge of reading and writing. There were villages in which the only person who could sign his name was the village priest. Now illiteracy has been almost abolished, the people are hungry for further knowledge, and the road to learning is open to both men and women on equal terms.

A widespread net of crèches and kindergartens, in which there are now about 7,000,000 children between 1 and 7, enables every woman to take her part in any form of labour or of social work she may choose. She is equal with man, not only in law but in reality; for the State sees that her children are well cared for physically and that their education is provided.

The work of the teachers extends from the home to the school: they visit the parents and arrange discussions and lectures dealing with the health and psychology of children and with education in general.

In 1914, there were 7,800,601 children from 8 to 14 in the schools of Russia, or about 52 per cent of the children of school age in the country. Only 25 per cent of these were girls. Now there are about 24,000,000 children from 7 to 14 and 100 per cent of them attend school. This means that during the last sixteen years, in spite of the immense difficulties which had to be overcome, many thousands of new schools have been built and equipped with books and apparatus, hundreds and thousands of teachers have been trained, and new written languages have been devised for more than forty nationalities.

Diversity of language, and the difficulty of obtaining text-books, present the greatest difficulty to the educationalists.

Education and Industry

In every school the curriculum is closely correlated with the needs of industry and agriculture, and a glance at the school timetable shows that special attention is paid to science.

School time-table for a seven-day week. 8 to 12 years.

1. Russian language ... 6 hours.
2. Nature ... ... 2 "
3. Mathematics ... ... 5 "
4. Geography ... ... 2 "
5. Labour ... ... 2 "
6. Social science ... ... 2 "
7. Foreign languages ... ... 2 "
8. Physical culture ... ... 1 "
9. Drawing ... ... 1 "
10. Music ... ... 1 "

From the fifth school year up, there are in addition:

Biology ... ... 2 hours.
Physics ... ... 2 "
Chemistry ... ... 2 "
Technology ... ... 2 "
History ... ... 2 "

A certain amount of elementary science is included in every time-table to form the foundation
of a materialistic point of view among the children, and the teaching of all schools is based on the reality of nature and social life.

'The knowledge worked out by mankind in the past must be critically assimilated by our youth', said Lenin. This means that the teacher must not only present the school subjects to the children, but he must aim at developing their critical faculty. More: knowledge is dead when it is not put to the service of mankind. This brings us to the idea of Polytechnization. Now Polytechnization does not mean the teaching of handicrafts, as so many people think. It means that in teaching, theory and practice must be united, that mental and physical work must be combined, that the close connection and interdependence of economical, social and political life has to be understood by the young generation.

Therefore the teacher must not only give the children knowledge of the general principles of modern production, its historical development and significance in social and political life. He must also teach the children about labour, machinery, tools and skill in handling them, so that they can see for themselves the connection between production, social life and cultural standards.

In the kindergartens and schools all the children—girls as well as boys—have to learn to handle tools. These tools are specially produced in various sizes and weights in accordance with the psychological and physiological requirements of children of various ages. A special scientific Institute of Polytechnization has been experimenting for many years in this subject.

Special programmes provide for all schoolchildren sufficient opportunities of learning how to handle paper, cardboard, textiles, wood, metal, electricity, as well as training them in gardening and the care of animals. Every schoolchild is given not more than three kinds of material to work with in each school year, in a sequence which is fixed in accordance with the relative difficulty in handling them and the amount of technical knowledge needed for their proper use.

Every school is connected with a factory whenever possible, and in the villages with a collective farm. Here the children learn what the modern production is like, how it is run by the workers and peasants of the U.S.S.R., how the social and cultural life is developing. The school takes every opportunity of helping the factory and the collective farm, and the children learn from them how they may improve their own work in school.

Education and Social Life

Then we come to Collectivism. The child has to learn to live and work in a community; but that idea does not run counter to the idea of a fully developed personality. No social unit has any value if the members of it have no personality. But our aim is to develop personalities which will not be antagonistic to the community, to bring out those qualities in any individual which will help him to be of the greatest service to the community. In the schools, this
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idea is put into practice through self-government and co-education.

Self-government means that the children learn to arrange their school-life and their work according to the interests of the community. They choose their representatives, who form a school committee which directs life in the school for a certain period. This school committee carries out its work under the leadership of the head and the other teachers of the school. Every form chooses its own committee which deals with all questions arising in connection with that form, such as hygiene, social and cultural work, self-discipline, the encouragement of backward children, social competition among the children, and so on.

Co-education does not simply mean mixed education. It means that sex is only taken into account in cases where physiological differences are concerned. But in knowledge, in mental capacity, in social life, both sexes are equal and are treated as such. This principle runs right through the educational system and leads to the equality of men and women in the social and economic life of the country.

The Role of the Teacher

As far as the teaching profession is concerned, therefore, men and women have the same opportunities and conditions of work and the same social position. More than half of the 628,000 teachers in the U.S.S.R. are women, and the appointment of a teacher as principal of a school, college, technical school or institute depends only on personal ability and not on sex or social position.

Teaching in schools is organized as follows. In all the first four classes, one teacher is responsible for nearly all the subjects. He has twenty-four hours a week of actual teaching. In the remaining higher classes the teacher only takes his own special subjects and has only eighteen hours a week of actual teaching. In small
villages where there are only a few children in each class, one teacher may have two classes, and this occurs in about 20 per cent of the schools of this type. A teacher cannot have more than forty children in his class in the first four groups and thirty-five in the higher groups.

The teacher holds a position of trust in the life of the community. Apart from the fact that he is entrusted with the care of the younger generation, the people always involve him in economic or cultural work. For instance, in agricultural districts, the teacher and his pupils help with agricultural experiments, in order to discover the best rotation of crops. Through his work with the children and with their parents and friends, the teacher is able to do a great deal to help in raising the level of culture among the peasantry.

The conditions under which teachers work and their material welfare have been steadily improved, and Lenin's wish—that their position should be raised to a higher level than ever before—is at last being realized. There is a close understanding between the teachers and the people, for they feel that they are all indeed working hand in hand for the good of the U.S.S.R.

Creative Dramatics

JOSEPHINE COLLIER

LIKE national administration in its fundamental programme, school administration must place human happiness above traditional axioms and venture courageously and cheerfully with students, exploring the fields of science and art to determine their social values. No longer will it suffice to furnish the child with certain fundamentals of learning. His orientation should acquaint him with the conditions of the world to-day and the functions of those elements with which he is acquainted—the airplane, the radio, the motion picture, the automobile—as well as with the value of his inheritance from the world as it has been. Furthermore, the school's duty is to help the child to think clearly, passionately, and alone, that he may interpret his country and other countries, that he may distinguish between knowledge and opinion, and that he may know his own ideas. One formula for aiding to realize these aims is creative dramatics, since drama is a picture and an interpretation of human life.

Creative dramatics, designed to combine historical accuracy, educational elements, and aesthetic merit, and at the same time to create an inquiring attitude toward social, economic and diplomatic development, will do much to acquaint young minds with the basic conflicts that are found in every domain of life. In this manner the exercise of responsibility and free scope for initiative may be provided for each individual; and individuality, as we know, is one of the marked signs of character.

A programme of creative dramatics which incorporated these aims and at the same time furnished the opportunity for the child's artistic self-expression, for group activity, emotional outlet, self-directed thinking, and a highly enriched and varied experience, has been in existence since 1931 in the Beverly Vista School, Beverly Hills, California.

A first grade's adventure with airplanes provided educational play and at the same time gave the young student a chance to live and learn under the drive of his own purposing and planning. Early in the study a visit to the airport gave the pupil an acquaintance with a business that had to do with the economic and social ventures of his father or neighbour. Here orientation took place because the school joined the society of which it is a part. The adventure, which stimulated the child to think and investigate, gave to him a larger conception of how men work in a corporate society. Another profitable result was the development of a specific vocabulary, which was brought about through expressing ideas relative to the study. Furthermore, the children became proficient in using books to find pictures that would aid them with details of construction of their airplanes and hangar.

A third grade activity started when the class...
became interested in the *kimono* and *obi* of a Japanese doll which had just arrived from Tokyo. It ended with the children’s sympathetic understanding of Japanese children, their customs, homes, dress, and art. Personality developed, character emerged, and confidence thrived among the pupils as they worked away at their tea house, wove mats, painted a Japanese frieze, and did delightful things with the space about their house. So much did these pupils enjoy personating Japanese children that the girls, later in the year, celebrated a doll festival, while the boys made kites and celebrated a kite festival.

Believing that no field of learning is richer in possibilities for the development of the creative powers than is the field of music, a fourth grade teacher taught the evolution of music to her class by stimulating adventure and discovery in fields related to music. After making drums of beer kegs and *marimbas* of red-wood, her pupils turned mixing bowls, cigar boxes, tin cans, and even coconuts, into musical instruments. Ancient lutes and more modern cellos were made from cigar boxes, and an early Egyptian harp was constructed with the use of a piece of wire, a bent stick and two tin cans. A most tuneful African harp was made from a cast-off kitchen mixing bowl. The result of the study was a full ‘symphony’ orchestra which presented concerts at the Rotary Club, Parent Teachers’ Association meetings and class assemblies. The concert numbers included, ‘Pagageno’, *The Magic Flute*, by Mozart; ‘The Three Kings’, *L’Arlesienne*, by Bizet; and ‘Cara Nome’, *Rigoletto*, by Verdi.

The study of California history is a dramatic experience to pupils of grade five. Living over the early California days, these pupils are first the *rancheros* and Indians gathering at the missions; later they celebrate the first modern *fiesta* of California, learning in so doing of the economic conditions in 1894 and then continuing this dramatic study through the brilliant and glorious story of California’s later development.

A semester’s work in a correlated study of the early development of language, literature, and social life of European races and nations, carried an eight grade class into art, where racial costumes of various periods were designed, and into music, where ballads and folksongs, characteristic of these people, were studied. Then the teacher, having created the right mood by building up an interesting and colourful background, inspired the class to follow the European immigrant to America, with the result that an original play, entitled ‘Within Our Gates’, was written by those pupils who were interested in, and capable of, creative composition. The play evidenced suspense and a gripping plot, because the students had become acquainted with the economic, political and social conditions of the European countries and of their own United States, and because human interest was the centre of attention.

The dramatization of this play required careful character analysis, clear and logical thinking, on the part of the pupils. In addition, it provided for the class of seventy-five—all of whom had an active part in the
A First Grade's Experiment with Airplanes

dramatization—an emotional outlet, training in co-operation, understanding and sympathy for others when placed in similar circumstances.

Under a teacher who has a sympathetic touch with the spirit of the glory of English literature in the past as well as the more graceful and artistic of the works of our modern writers, pupils may through dramatization be stimulated to resent injustice, admire manliness, praise just achievement, encourage respect for standards, scorn the usurer, and consider the views of other men. Tremendous is the appeal to young people as the charm and beauty of Sir Walter Scott's Ivanhoe unfolds itself in the dignified and lovely court scene. Of great benefit to girls is the impersonation of the impulsive and capricious Janice Meredith when she subdued the British hearts at Philadelphia, or conquered both friend and foe at Yorktown.

To the boys who depict the wholesome adventures of Mark Twain's Tom Sawyer, Huckleberry Finn, and Pyle's King Arthur, come clean, enjoyable combat and appreciation of the accomplishment of men who have already encountered the experiences of life for which they are becoming impatient. Perhaps no other book interpretation, of which there have been many, was ever enjoyed more at Beverly Vista than was Henry Gilbert's Robinhood, The Man of the Greenwood.

Undoubtedly the most educational of any creative dramatics fostered by the school, was the creation and production of the Pageant of America, a pageant based on the variegated past which made our national story, which was in execution and spirit a school community affair. Historically it was potent, dramatically it was a living portrayal of the struggle of our forefathers in clearing the wilderness—an aid in orientation. From a literary and musical point of view, as an education in beauty, it carried with it a value which cannot be measured.

A development of another type came previous to the celebration of the tenth Olympiad of the modern era held in Los Angeles in 1932, when the pupils of our seventh and eighth grades became interested in the origin and growth of the games. In this study, which was inspired to build a bridge of understanding between the old cultures and the new, to recall to young minds the greatness of the past, and to show that people are and always have been interdependent, the pupils found that the Greeks were largely responsible for the high school geometry of which they had begun a study. The origin, however, they found could be traced to ancient Egypt. Thus they discovered a significant connecting link between the Greek civilization and the Egyptian civilization. A clever geometric play, written and staged, dramatized the measurements of height by means of shadows, also of distance by means of similar triangles, whereby the Greek method was shown to be dependent upon but superior to the Egyptian method. Furthermore, the pupils showed how this interchange of ideas, which was brought about through
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commercial intercourse between the two countries, resulted in the introduction of the study of geometry into Greece, where the foundations of the science were developed.

Creative dramatics, which provide for child initiative, child freedom and personality development, must proceed with accuracy, precision and thoroughness if they are to function justifiably. A school adhering to these principles may throw itself wholeheartedly into developing the creative powers of its students, thereby germinating a spirit in the hearts of the children which will lift them to higher standards of truth and beauty, to greater poise and self-control, to broader visions of justice, and to the culture which comes with corporate struggle. In this manner the school is assuming some responsibility for educating the child toward intelligent control of his leisure hours.

PARENTS’ SECTION

Owing to the many requests we have received from readers, the series of articles for Parents planned by Dr. Te Water and the Consultative Committee will continue to be published in THE NEW ERA.

CONSULTATIVE COMMITTEE

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EMOTIONAL CONFLICTS BETWEEN HUSBAND AND WIFE

MARY LUFF

In a happy family, parents play two major roles in the life of a young child. They give him a sense of security, a feeling that he is not only loved and wanted but that he has his own definite place in the world. They also give him his first picture of human relationships, of how, by mutual service and common interests, the world hangs together. This is true of any happy home, however poor; for a good emotional environment is even more important to a child than his material surroundings, and, conversely, no care expended on his health and enjoyment can make up for a lack of emotional security.

Effect of Parents’ Relationships

It is not always realized that the relationship between the parents themselves is at least as important to the child as his own relationship with either the father or the mother. If husband and wife are in fundamental disagreement the child will not only have a personal sense of insecurity but will grow up with a warped and suspicious outlook on relationships between human beings in general. This will not only affect his personal dealings with the individuals with whom he comes in contact but will also give him an unhappy attitude to groups of human beings, such as other classes or nations.

To the young child, his immediate family is the world. Outsiders may impinge upon and attract his attention, but they do not matter to him emotionally. It is the parents who are to him the interpreters of the world, and through their relationships to each other he sees mirrored all human relationships.

Two Types of Conflict

Broadly speaking, all emotional conflict can be divided into two groups—those which are apparent to everyone and appear on the surface of the relationship, and those deep-seated
conflicts which are seldom allowed to come to the surface, at any rate in public. Open disagreements, actual quarrels, though they may appear more dangerous, in reality do the child less harm than a fundamental antagonism which the parents may try to conceal for his sake. For instance, a boy of five and a half, who had without unusual difficulty learnt cleanly habits, suddenly developed spasms of bed-wetting. His parents were well educated people who realized the dangers of quarrelling in front of the child; but there had recently been differences of opinion between them over their sexual relationship. When they went into the matter thoroughly, they found that each crisis in their relationship coincided with a spasm of bed-wetting in the child. It was quite clear that the child's symptom was a reflection of the recurrent strain between the parents.

When a marriage has degenerated into a prolonged war or series of battles, it is seldom that the opponents are equally matched: one is likely to dominate and the other to be victimized. This is extremely dangerous for the child, because he will almost certainly take sides, either identifying himself with the dominant partner, or attaching himself protectively to the weaker one. He may even swing between these two loyalties, and will then be tortured by a sense of guilt and disloyalty to the parent he has deserted for the time. Such a child tends to grow up into a violent and unreasoning partisan, who can never see any faults in the cause he champions or any good in his opponents. His sexual development, too, may be profoundly affected. This is illustrated by the case of a girl of twenty-five. Her father was aggressive, violent and domineering; her mother was gentle and sweet, gave in to him in every way and did not outwardly appear unhappy. The child grew up with a bitter conviction that all men were cruel and domineering, and her social life was dominated by her fear and hatred of men: marriage to her was an impossibility, and she finally broke down completely. It might have been far better for her development if there had been open conflict between her parents.

Other difficulties arise when the girl champions the father. The masculine side of her nature may then become over-developed, and normal fallings-in-love be impossible. On the other hand, a boy who allies himself with his mother against an overbearing father is likely to develop into a man who rebels against all authority and cannot work happily under his employers. Obviously in all such cases the best solution is for the parents to recognize their difficulties and try to solve them together, either privately or—if this is too hard—with the help of a psycho-therapist.

When Parents Separate

When parents come to the conclusion that they must separate, even a child of four or five should be given some explanation. Otherwise he will be perplexed and miserable, as he will inevitably compare his home and his parents with those of his friends. An unexplained mystery should be avoided at all costs, and all his questions should be answered frankly and at once: he should never be put off by being told that he will know all about it when he is older.

After the separation it is very important that neither parent should run down the other to the child; for such an attitude may have disastrous effects on him. A typical case is that of a girl of thirteen, who was so unusually backward that she was suspected of being mentally deficient. The mother married very young, and her husband was almost immediately and consistently unfaithful to her. When the child was eight there was a divorce, and the mother's family rallied in her defence. The child was, however, allowed to visit the husband's people and see her father occasionally. Then the mother married again and went abroad, leaving the child to spend the holidays with her maternal relatives and to see her father from time to time. The mother's family persistently ran down the father and told the child that he was a devil incarnate. But the father and his family—cheerful, happy-go-lucky people—were charming to the child and gave her a marvellous time whenever she went to see them. As a result she was completely bewildered. When she was twelve years old, the mother came home with her new husband and took the child to live with her. She found her backward, repressed and retarded in every
way. This was due to the fact that she dared not think about the father whom her grandparents described as a devil and who was yet so charming to her; in consequence she was afraid to use her mind, and so grew up in a situation in which she was not able to think at all.

Social Relationships

We have already said that the relationship between the child's parents is an important factor in determining his ideas of social relationships in general. In his dealings with other people, and especially his brothers and sisters, the child is likely to reflect the parents' difficulties with one another. Conflicts between brothers and sisters can sometimes be traced to conflicts between the parents in which the children take sides. For instance, a boy may side with the mother and a girl with the father, and therefore the brother and sister may be quite unable to agree. On the other hand, the children may feel that their home troubles cut them off from ordinary happiness and as a result they may band together against all outsiders so that when they go to school they are particularly difficult and aggressive.

Only too often unhappily married parents will try to outbid each other for the child's affection, so that he grows up into a person who is always demanding special attention and insists on being somebody's favourite. When in adult life such a child meets people in conflict—for instance, two partners in a firm who are in disagreement—he will attempt to curry favour with one. His political outlook, too, may be profoundly affected. He will not only tend towards unreasoning partisanship, but he will believe that nothing can be done without conflict and that conflict is a far stronger power in the world than co-operation.

One example is that of a woman of forty who is extremely intelligent and has a very good job, but who has been hampered in her work by memories of the violent quarrels between her parents. When she was a child she invariably suffered from sickness and diarrhea at the time of these disagreements, and still, when she has to deal with opposition of any kind, or to cope with a quarrelling committee, she is almost overcome with nausea and terror.

In a household where the parents are in fundamental disagreement, there will obviously be none of the little exchanges of affection which come so naturally in happy marriages. The child never sees any physical demonstrations of affection, and may in consequence find any physical expression of emotion difficult or even repugnant to himself, and so be unable to adjust himself to a normal sex life.

It is always worth while to try to save an unhappy marriage, even when there are no children. When there are children, the innocent third party is almost invariably harmed. Husband and wife should therefore do all they can to understand the cause of their difficulties and overcome them. Yet it is no good attempting merely to patch up a fundamental disagreement. However outwardly pleasant the parents may be to each other, the child invariably notices the underlying tension and not the desperate attempt at amiability. When the fundamental discord between the parents is so great that no real reconciliation is possible, it is far better from the child's point of view that they should separate on some reasonable basis than that they should continue to live together and thus allow the child to be the victim of their emotional conflicts.

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**IMPORTANT NOTICE**

The next number of THE NEW ERA will be a special enlarged issue devoted to MUSIC and it will appear at the end of June, price 1/-.

Readers are also asked to note that the closing date for our special offer of a 4/- subscription to each regular reader who finds a new subscriber, has been altered from March 31st to June 1st.
The Dalton Plan and Modern Language Teaching
M. G. Francis

'Reverence for human personality is the beginning of wisdom in every social question, but above all in education,' says Mr. Bertrand Russell. The Dalton Plan is an attempt to put this into practice; it aims at giving the child freedom to develop her own personality, as well as some idea of what she is doing and where her curriculum is leading, not from one examination to another, but from one step in a subject to the next. The child is able to see the relation of one month's work to another and even to appreciate the general plan for the whole year. Homework becomes a means to an end; not something arbitrarily imposed from above.

The Modern Education Problem

And yet, like all good plans, the Dalton Plan bristles with practical difficulties. It seems significant, for instance, that in Miss Parkhurst's account of its progress in its application to America, there is very little reference to modern languages, most of the examples being taken from history, geography and the sciences. Language specialists tend to be doubtful of the Dalton Plan as involving too much unsupervised written work, which is dangerous in language-teaching. Homework, they say, should always follow directly upon a particular lesson, and not be set for weeks ahead as in the Dalton Plan. It is not possible, they complain, for children learning a modern language to look up facts for themselves as the Dalton Plan prescribes.

I should probably have agreed with these detractors entirely had I not had the good fortune to be on the staff of a girls' secondary school when the Dalton Plan on a modified scale was put into practice. It was a school with a very ordinary type of girl, rather slow and uncharacterized by any particular initiative or enterprise. However, the school already had free discipline and it was felt that freedom of work was the necessary corollary to this. So it was decided to try the experiment for a month at the end of the summer term, after the June examinations.

There were many doubts at its inception, but it proved so successful that it was decided to continue with it, though still in a modified form. It did not seem to be suitable for girls in their first two years at school. These forms kept to the old system while the Upper Fourths, Fifths and Sixths were given free study afternoons each week and no homework timetables. The form-rooms became subject-rooms also and there the subject mistresses collected everything that might be useful for girls working by themselves. The French room was well supplied with dictionaries, grammars, readers, as well as posters, mounted postcards and current copies of La France and L'Illustration.

Arranging Assignments

Monthly assignments were given which contained a description of the ground to be covered both in class and independently. We began by dictating assignments, but very soon decided to give out hectographed copies instead to prevent inaccuracy and save time. The mere fact of having an assignment for herself helped to give a girl the feeling that it was a piece of work she herself must accomplish, and if the assignments were carefully kept they were most useful for examinations at the end of the year. In the teaching of French grammar and syntax they enabled the girls to see the relation between the two: they would discover that the syntax questions for the second week depended on the grammar that was to be learned or revised in the first. It very often paid to spend a whole lesson or a large part of it at the beginning of the month on an explanation and discussion of the new assignments.

Except for the sixth form the assignments in French were always subdivided into weeks, and the written work had to be given in on certain dates. This seems reactionary, but the girls were still free to do their work on any one of the two free study afternoons or any evening. In the School Certificate form composition work was often spread over a fortnight. Also it was often stated on an assignment the day on which a certain construction or grammatical point would be dealt with in class, so that no one would attempt an exercise on something she knew nothing about.

Corrections and Questions

In a non-Dalton school a great deal of the actual lesson time must be spent in the correction of homework, but under the Dalton Plan all this can be done in the free study periods. The fact that a girl can get help when she is actually doing a piece of work means that there will be fewer corrections to be made in it later. Instead of spending the time of the form explaining the difficulties of an individual or a group, those in difficulty could be reminded that help would be given in the free study periods. The result of this in practice was that it was much more possible to keep the divisions level without making the better girls waste time. It also meant that the lessons were much more brisk; when once a point had been grasped by the majority of the form the rest could be left until Dalton time.

One of the first practical difficulties of the Dalton Plan was that at the end of a free study afternoon the teacher would find that she had answered the same question at least twenty times, but after a while the girls themselves saw the futility of this and those with the same difficulty would come together to have it
The Plan in Practice: Fourth to Sixth Forms

Perhaps I ought to give some account of how the various forms worked under the Plan. First the Upper Fourths: these were new to it and always took a little time to settle down. In preparing their assignments it was necessary to let them down lightly, and in the first month we gave them a good deal of memorizing of poetry and prose, and exercises based directly on their readers. In the second month they really began to do something for themselves, if only to make their own verb-books for which they had to collect examples from their reader. Composition work began by question and answer, and gradually became more free. At this stage the value of the assignment lay in the fact that they could see from it what the lesson was going to deal with and what bearing it had on what they were doing for themselves. Consequently they approached it and the teacher in quite a different spirit. In their Fourth Form year they did very little written work entirely alone, but rather prepared to contribute to the work done in class.

In the Lower Fifth year the Dalton Plan was of still greater value, for in this year we attempt to revise and systematize the grammar learnt in the first three years. The making of their assignments is a lengthy business, but well worth while when it comes to examinations. In a good Lower Fifth a great deal of free composition is done, and as these need not be corrected in class time it is possible to give more choice of subject to suit the various interests and abilities of the girls. In a weaker division less time is given to free composition work and more to compositions based very closely on the readers, as well as the collection of examples of grammatical points and constructions from them.

The first Upper Fifth to work on the Dalton Plan was rather panic-stricken, but before long they were the most appreciative. It gave them a sense of freedom in spite of the impending examinations. The assignments themselves gave them a certain amount of confidence, for they realized that if they had completed all the items and reached a certain standard they could be reasonably optimistic about their chances in the examination.

In Sixth Form work the advantages of the Dalton Plan in modern language work are greater still. The assignments enable the girls to realize that they are not merely studying isolated texts but movements or periods in literature. Here it is even possible to give
an outline of the whole year’s course. The free study
time is used in reading as preparation for seminars
and discussions, in acquiring information to form a
background from such works as the Cambridge Modern
History, Evans’s Medieval and Modern France, and so
on. It seems significant that when these girls go on to
the university they are able to adapt themselves much
more quickly to greater freedom and responsibility for
their own work, while on the other hand those who
go on from a Dalton school to a training-college,
where there is a certain amount of rigidity of time-
able and stricter supervision, find this decidedly
irksome.

The Teacher and the Dalton Plan

The Dalton Plan involves a great deal of marking
for the teacher, because on the whole there is more
written work. Such things as verb-books, anthologies
and vocabularies must be handed in from time to time,
and carefully marked if they are to be of any value.
Ordinary work may be given in at any time, so that it
is very rarely possible for the teacher to correct a
whole set together. But I am convinced that the
Plan is worth while, even with these Midland chil-
dren, who, as a rule, find languages more difficult than
anything else. A marked difference appeared in their
work and still more in their attitude to it. They seem
to gain a sense of responsibility and independence, so
that the work is better because the drive comes from
the child and not from the teacher.

One of the most important features of the system is
the subject room. It is so much easier to create the
atmosphere of a foreign country in one room than by
carrying round posters and postcards to each form
room which the teacher of modern languages visits.
My present form is a keen Lower Fifth, mostly in
the first French division, and between us we have
turned the form-room into the French room. They
are always ready to help by mounting postcards
and posters: those whose printing is good make
copies of poems and songs and others illustrate them
for the walls. They hang in the room for a week or
more at a time. Here we also keep the French fiction
library and in the dinner hour on Thursdays anyone
may come and change her book or her gramophone
record and look at the magazines and newspapers.

The danger of the Dalton Plan, as of any other, is
that it may become a mere formula: its value lies in it
the fact that it does give the child freedom to adapt
itself to its environment. In the teaching of modern
languages, the spirit and the principles of Daltonism
may often be applied without the actual framework
of the Plan itself.

Adult Education in Finland

IVAH E. DEERING

In the land where the Northern Lights send a
path across the heavens, where the poro, or
reindeer, is a beast of burden and the long
winters try the soul of man, there is a school
for Lapps, where youths and adults may come for
five months and satisfy a little their hunger for
knowledge of the world in which they live.

The Folk High School

To us, the first Americans to visit the Kansanop-
isto, or Folk High School, at Sodankyla, it seemed
an amazing institution. We arrived on Easter
Monday, and were driven from the station in a
sleigh with jingling bells. Only the teachers met
us at the door, but when we were ushered to the
dining-room for the ever-present cup of coffee we
were greeted by the student body in their native
costume with a rousing welcome song. Unaffected
and unafraid, these eager young people were ready
for all new impressions, and most of all for new
friendships.

The Master, Mr. Einar Lilja, is a simple man,
shy to the point of embarrassment until he is lost
in the message which he has to give; then his eyes
twinkle, and in his great earnestness of purpose he
forgets himself and gives of his best in the effort to
stimulate the minds of the students to real activity. We
saw these students doing intricate handwork, add-
ing new patterns to the age-old crafts of their people
and investing that work with new dignity and
beauty. We saw their gymnastic classes, where
the best methods of all the northern countries in
physical arts were interpreted very simply to these
untrained minds. We watched their eager faces
as they listened to the Master, and found that this
eagerness prevailed everywhere, for the school
stands every test of modern progressive education,
and has a well-balanced programme of physical,
mental and spiritual training fitted to the life to which
the students must return.

We heard there the songs of Lapland, which are
not songs but akin to the chant of the American
Indian, and we were told that each northerner has
his own tune. We sang with the students, and taught
them the simplest American songs we knew. We
worked with them, played with them, snowballed
with them and with their teachers. And as we
were carried back to the bus which was to take us
to the next folk school further south, we could see
the waving hands in the porch, and hear the voices
ringing clearly across the snow in the beautiful
farewell songs of friendship.
Educational Ideals

It is a real school and typifies in its splendid simplicity the great system of education which Finland has developed throughout her borders for a period of sixty years. From the most rural the largest and the most complete folk school is not a far cry, since all are under a common Board of Directors and conform in some degree to a given standard. The management may differ in the various sections, for each unit is free to develop new projects to meet specific needs; but the statement of purpose could invariably be summarized in the terms used frequently by the leaders of progressive educational thought in America—'A full and rich life for every individual, of whatever age'.

The Board is assembled for regular annual meetings by a national President: the teachers also meet once a year for the study of their specific problems. Rope Kojonen, Secretary to the Board as well as Director of the largest and most established of the folk schools, at Lahti, said to me during my two weeks' stay at his school, 'The problem of the Kansanopisto is not the same as that of the Grammar schools or the High Schools of your country. We must have separate Institutes for our teachers. We bring people of all ages, but chiefly between eighteen and twenty-five years, to the village nearest their homes, and we may have them only for five or six months out of their whole lives. Often the period they spend with us is the only real academic education they get. Our responsibility is therefore very great indeed. We must educate all our people, if we do it as it should be done, they will not become dissatisfied afterwards, but will stay on the farms and will be much happier.'

It was this effort to enrich the lives of people in the rural sections of Finland that impressed us, particularly at Lahti, where Mr. Kojonen and his wife have been Directors for twenty-five years. There in the Great Hall the decorations are symbolic of this emphasis on the simple and the true, and above the stage is the crossed scythe and pick among the grain. There too we found the hand-work classes emphasized, with much more elaborate equipment in the Domestic Science department, and many new and lovely patterns in the weaving; for this school has some three hundred pupils and an adequate number of highly trained teachers. As in the other folks schools, many subjects are taught, the effort being always to make the lessons practical and useful to the individual. History (particularly the national history of Finland), economics and public-speaking are favourite subjects, as are also music and gymnastics for both men and women, for all these folk schools are co-educational. Clean, moral living is a common aim, and a real effort is made to instil ideas of freedom and love of country.

The living is invariably simple, never luxurious, and each student does a share of the work of the school, as he and she must do in the home. The cost of tuition is small indeed, for Finland is a poor country and must balance her poverty of purse with richness of living. It seems that they are achieving the purpose expressed so vividly by Mrs. Kojonen—'We must teach them to think, to use what they have, and to love the beautiful. And it is necessary to teach everybody, since everybody is equal and has an equal part in a democratic government'.

In all these schools there is much free discussion
of current topics and individual thought, and many study groups continue to meet long after the school period is over. We were one day discussing the political situation in Finland with an older woman whose German had to be interpreted by a young daughter of twenty-three. There was a difference of opinion, and the mother suspected that her opinions were being coloured in translation by the point of view of the younger girl. Just as the discussion became really heated a seventeen-year-old sister entered and said soothingly, 'Please understand that these subjects are very near mother's heart, and she cannot know that all of us may differ greatly and be honest. I am sure my sister gave the correct interpretation of my mother's ideas; but she herself thinks so differently. You see, my mother and father are Liberals, my sister is a Conservative, and I am a Socialist'. Apparently the theory of teaching everyone to think is successful.

The Workers' College and Institute

Special schools there are also, such as the Workers' College at Grankulla, where under the most charming conditions and the able direction of Toivo Wuorenrinne and his equally able wife, the labourers are sent sometimes by their unions to receive cultural training as well as specialized assistance in the field of leadership. There are too the Free Institutes, held chiefly in the evenings, where the business person may study under trained instruction the subjects in which he or she feels the need of help. There are the clubs and classes at the four great Settlements, where we discovered most progressive social attitudes and activities. Dr. Sigfrid Sirenius has been a leader in this movement since its inception in 1918. Calliola, or The House Upon a Rock, in Helsinki, contains a story in itself, for it has meant school and home and social club to so many of Finland's labouring people. Behind the schools are the organizations which have prepared the way in better understanding. Among these there is the Kotakasvatus Yddistis, or Home Education Association. Based on a definite religious foundation, this organization has reached great proportions. Into the furthest simple and primitive rural sections go professors of the University and teachers specially fitted to present some phase of life. About the fire they gather—the fathers and mothers of the forgotten villages—and in the long winter evenings, usually without books, they discuss the problems that touch every human being, something of the training of children in moral living, what the school means to a person, a little of the eventful daily life of the world without.

The University

Wherever there is education in Finland, there is also the University man or woman. For this country takes its higher education seriously. The Great Hall of the University in Helsinki has something of a sacred atmosphere, and the library is always filled with students. Into the social fields they go for research, into the Settlements for practical work, and far into the country as leaders in these very discussion groups which are so much a part of the life of Finland.

But on one day in the year the University student plays. We were fortunate indeed to be in the capital on May 1st, when every student, old or young, dons the insignia of his position—the white student cap, which he wears for the remainder of the year, wherever he goes. On this one day the city belongs to the student. Thousands of young people march along the streets with flowers and coloured pompons and balloons, singing old class songs in groups. Often they will all join, without apparent leadership, in one familiar song, and sometimes the crowds stop in the park to rest and refresh themselves with the national drink, simmae, at long tables set in the sun.

The students make much of this day before the work of the morrow begins. For the student in Finland does not find it easy to get to the University, and when he arrives he works every day of the year—except May 1st. He is the teacher, the lawyer, the doctor, the social worker of the future: from his ranks come the educators, whose duties and responsibilities are particularly great in Finland, where all the people go to school.

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Museum Street, London, W.C.1
THE FUTURE OF THE NEW EDUCATION FELLOWSHIP

WILLIAM BOYD

The New Education Fellowship has reached a dangerous age. It is nearly twenty years since it came into being and in these years it has grown extraordinarily from a small group of like-minded enthusiasts to a great organization reaching out to every country in the world and exercising an influence on current educational thought and practice far beyond its direct numerical strength. International conferences, increasing steadily and embarrassingly in size in spite of financial depression and national crises; sections and groups springing up actively in nearly forty nations; discussion and propaganda through magazines in twenty-two languages; the linking up of bureaux for the guidance of new educators in the great centres of Europe and America; combine to give a most impressive picture of the great world movement which had its origins in the Fellowship of 1915. And yet, I repeat, the New Education Fellowship has reached a dangerous age.

The danger that threatens is one which in the course of years besets every vital movement. The time inevitably comes when what was originally an inspiration depending upon the personal insights and labours of its advocates must be organized and given definite structure for its perpetuation. And always there is risk of loss in the process. Christianity and democracy are examples on the grand scale. The situation is always recurring with any social movements that have power in them. It is the situation which confronts the New Education Fellowship now.

The Basis of the Fellowship

The first question concerns the implications of membership. To what ideas and practices is one committed by becoming a member of the Fellowship? Must one subscribe, for example, to doctrines like those which used to stand as a New Educator's Confession of Faith on the back cover of The New Era, professing that 'the essential object of all education should be to train the child to desire the supremacy of spirit over matter and to express that supremacy in daily life'? Alternatively, if there be no general profession of new educational doctrine, are there any special practices expected and required of the faithful member of the Fellowship, in regard to matters like co-education, corporal punishment, individual methods, free curriculum, etc?

So far as the ordinary member is concerned the problem of defining the basis of membership is not usually a serious one. Fortunately for the Fellowship, most people are not much concerned about statements of principle, so long as the working policy of the group to which they
belong is satisfactory. But obviously it would be better if there could be agreement on the fundamentals of the beliefs underlying our membership. Actually the long-standing committee, charged with the task of preparing a statement of principles for the Fellowship, has found it one of extreme difficulty. The reason is not far to seek. So long as we keep to abstract negatives it is easy to get agreement; but as soon as we come to positives, we are up against deep cleavages of opinion. One of these seems to be between those who believe the aim of education to be the development of personality, and those who hold the other, possibly conflicting, view of the educational aim as the rounding off of personality in willing loyalty to causes greater than one's own life.

So long as there is need for a strenuous opposition to existing practice these differences are probably of little account; but when one is looking ahead to the future of the Fellowship, such issues cannot be ignored. Meantime, the way of wisdom is to accept the fact that people of very different faiths have come together in the common interests of a new education based on the free personality, and trust that out of these common interests will emerge general willingness to stress agreements and a ready tolerance of differences as a likely source of spiritual enrichment for everybody.

The Distinctive Work of the Fellowship

More important for the future than the formulation of a Credo is agreement on a working policy which will enable the Fellowship to make a contribution to educational advancement different from that of any other body concerned with education, and at the same time vital enough to bind and hold its membership in common purposeful activities.

Here there are two quite different problems. The first concerns the ordinary member, the person who reads The New Era, attends N.E.F. meetings and conferences, and dislikes coercive methods in education. It is on this person that the future of the Fellowship ultimately depends. Is there power enough in the urge which has brought the movement into being to inspire parents and teachers and other educationally minded people to persevere in an active attempt to convert their ideas into realities under the ordinary conditions of school and home? So far, the Fellowship has not been unsuccessful in this respect; but more needs to be done to extend the spirit of new education among teachers and parents.

The other problem relates to the special sphere of work of the Fellowship as a whole, and its special activities within that sphere. It is not enough to say that the Fellowship stands for a creative education that sets free the powers of man. Beyond the freeing of the human spirit by removal of inhibitions, there is need for constructive directing principles. Actually, the Fellowship has been working out a constructive faith, both consciously and unconsciously, from the beginning, and its future course is already indicated in some measure by its past achievements. The idea that sums up the ideals behind its policy is not, as so many people imagine, that of self-realization, but rather of wholeness.

Wholeness implies insistence on education covering every aspect of life. Citizen, parent, teacher, administrator—all look at the upbringing of children from their own special angles. The new education brings them together on a common platform. Formal instruction isolates certain aspects of experience at certain periods of life. The new education sees life and learning as continuous processes with constant inter-relations, and tries to view all social institutions synthetically as contributors to personal fulfilment on the one hand and human progress on the other.

What does this mean in terms of practical policy? That the Fellowship is concerned with every phase of child guidance and direction, formal and informal alike, and that at the same time with that in view it makes it its special endeavour to bring together family and school, play and learning, schooling and life work, juvenile and adult interests, voluntary groups and nations, national and international movements, in a great common striving for human betterment. It is this ideal which has animated its world conferences and co-operations, and its persistent endeavours to clarify educational thought and practice.

The Government of the Fellowship

The problem of organization for a world-wide movement like the new education is at once easy and difficult. It is easy in so far as it involves (of necessity) complete national autonomy. Every country and every section within every country will manage things for itself in its own way. The problem becomes difficult, however, when sustained co-operative action is required; for example, in the organization of a world conference, or of a co-ordinated system of bureaux, or for propaganda work in countries where the movement is weak.

International co-operation means bringing together people of different nations, and even where there is so much mutual good-will and so little clashing of interests as in the New Education Fellowship, it raises many difficulties. There is the difficulty of busy people sparing the time for distant meetings. There is the difficulty of expense. There is the question of a meeting-place which is suitable geographically and sentimentally. In actual fact, the only times when the Fellowship is ever really successful in bringing together a representative gathering of new education leaders or of its International Council or Executive Board, is in the midst of the excessive busyness of some large conference. Between times it has to content itself with casual meetings of a few people and periodical exchanges of view by post.

The wonder is that under these conditions there is an international Fellowship at all, and still more that it has gone on growing in numbers and power. That could not be if there were not at work everywhere a new spirit. Nor could it have been without the splendid organizing activities of one or two directing personalities, who have taken on themselves with general approval the planning and thinking for the
movement as well as the exercising of necessary controls.

But what of the future? The answer is not wholly to be found in the evolution of the Executive Board, though that is an important guarantee of stability and endurance. So far as there is a general solution for the problem, it is to be found in entrusting leadership to the centre in which the movement is most alive, and setting aside an amount representing a reasonable salary for some man or woman to act as organizing director at that centre.

**The Financing of the Fellowship**

If the government of the Fellowship can only be democratic in the limited sense that the leader or leaders responsible for its conduct enjoy the confidence of its members, there is one sphere in which the Fellowship must in the future be entirely dependent on its members. That is in its finances. It is an open secret that up to this point the contributions of the members have not been sufficient to meet the whole cost of the Fellowship, and that but for generous donations from different sources the work could not be carried on. While it is permissible for a young movement to make use of the resources put at its disposal by friendly donors till it has firmly established itself, a time comes when for its self-respect it must pay its own way. That time has now come for the Fellowship. The people to whom it has brought a great spiritual quickening—and they are many—must have the obligation put definitely to them of contributing adequately to the Fellowship in service and in money. 'Freely ye have received. Freely give!' With a proper sense of responsibility on the part of the members, there should be no difficulty in adding sufficiently to the membership to make the Fellowship self-supporting. And if for any reason more money is needed, the need should be put frankly before the members in the faith and confidence that it will be forthcoming from them.

**CHARLOTTE BÜHLER'S VISIT TO ENGLAND**

Dr. Charlotte Bühler has accepted an invitation from the Fellowship to pay a month's visit to England this spring. She is expected to arrive about May 3rd, and will be lecturing in London and the provinces from that date until the end of the month. Dr. Bühler is Professor of Child Psychology in the University of Vienna, and has long been associated with her husband, Professor Karl Bühler, in the work of the Psychological Institute of that city. The studies which she has directed on various aspects of mental development during infancy and childhood are, in the view of many English specialists, of outstanding significance for psychology and education. Dr. Bühler is well-known in the United States, where she was for some time a guest professor at Barnard College, Columbia University. In England she is known chiefly for her volume on *The First Year of Life*, which is of special interest to those concerned with the application of scientific method to the study of young children. But her investigations have ranged over the whole field of human development, and have recently culminated in a volume dealing with the human career as a whole and contrasting the biological with the psychological curve of life (c.f. a review of this book in *The New Era*, December, 1933).

During the last two years Dr. Bühler has been directing a detailed investigation into the family relationships of children of school and pre-school age. Much important scientific material has been collected concerning such educational problems as the effect of rewards and punishments and the influence of adults upon children. None of this material, however, has yet been published. At the Fellowship's request Dr. Bühler has also devoted a part of her work this winter to a study of teachers' personal problems, with a view to lecturing on the subject during her visit to England.

A reception will be given for Dr. Bühler by the Fellowship in London on Friday, May 4th, when she will speak on *The Human Career as a Psychological Problem*. Later she will give three series of lectures for the Fellowship at Headquarters in London. Each series will consist of three lectures. The first will deal with *The Development of the Child's Personality from Five to Fifteen* (May
The second, based on the results of the investigation into family relationships mentioned above, will be entitled *How Children Behave at Home and Why* (May 21st, 23rd, 28th). The third will be concerned with *Teachers’ Personal Problems* (May 15th, 22nd, 29th). Further particulars can be obtained from N.E.F. Headquarters.

**THE FELLOWSHIP AT WORK**

[These international notes are now confined to the work of sections, groups and individual members of the N.E.F.]

**Headquarters**

*World Fellows.* Miss C. L. Stocks has the distinction of being the first World Fellow to complete her booklet of forms for new members. We congratulate and thank her. If any other members would like to help to increase our membership in this way, we shall be very glad to send them books of blank membership forms.

**Friday Teas.** At the Friday Teas (5 p.m.) the following talks have recently been given: 'What can be done about examinations?', by Mr. Wyatt Rawson; 'Social work in South Africa', by Dr. and Mrs. S. H. Pellissier of the Orange Free State; 'De Werkplaats, Bilthoven, and its Auto-Didactic Apparatus', by Mr. Bruno Neuner; 'Why raise the school age?', by Mr. Frank Roscoe. In April the following talks have been arranged: April 6th, 'Instruction and Occupational Centres', by Mr. A. J. Lynch; April 13th, 'The Hertfordshire Rural Music School', by Mrs. W. M. Pryor; April 7th, 'Eurhythmics: Do they restrict self-expression?', by Miss M. Bird.

**Physical Training Classes.** A special course on the 1933 English syllabus of Physical Training is being given to meet the needs of those who had worked on the 1919 syllabus and who now want to acquaint themselves with the requirements of the new syllabus. Entries for the Women’s Classes were 70: for the Men’s, 81! The Men’s Classes were not held. The apparatus for the classes has very kindly been lent by Messrs. T. M. Gardiner, Ltd., Burford Works, Hoddesdon, Herts. This firm not only supplies the usual gymnastic apparatus, but has in stock all the new items required by the 1933 syllabus.

**A New Day School in London**

On May 1st next, a new modern day school is being opened in Wimbledon, which will provide a free educational environment for boys and girls between the ages of five and eighteen. A novel feature of the school is the fact that it has been promoted by an association of parents. Mr. Andrew Tomlinson, at present head of the Department of Extra-mural Studies at Southampton University College, is to be the headmaster. An interesting experiment in connection with the school is that a number of German children are being taken, with the object of affording them an opportunity of adapting themselves gradually and organically to English ways and English speech. The German children will be either full boarders or weekly boarders. Mr. and Mrs. Bulowa, of 29 Belsize Park, London, N.W.3 (formerly Directors of the Montessori School in Berlin-Dahlem), are responsible for this German Section of the School. German parents will be glad to know that the fees for German pupils are extremely moderate.

Besides a free atmosphere for intellectual development through individual work, particular importance is being attached to the children’s physical development through sports of all kinds and work in garden and workshop. At the same time special attention will be paid to the examination requirements of suitable children without sacrificing their whole school career to that end.

**Irish Free State**

In January last, Dr. Montessori visited Dublin in order to give diplomas to the students who had been taking a Montessori course under Miss Van Tromp at the Mount Lion Convent at Blackrock. In the course of her visit she met the President and Ministers of the Free State, and spent a morning with the Minister for Education and his inspectors at St. Joseph’s Orphanage. After her departure, a meeting of between 700 and 800 teachers and others took place at the theatre of the Dominican Convent in Eccles Street, where an exposition of the Montessori method was given by Mrs. Eleanora Gibbon, who introduced it into the schools of Waterford fourteen years ago. She was followed by Brother Flannery, who arrived from India in March, 1933, and, having spent a week in the Montessori Schools in Philip Street, appointed a Montessori teacher head of his Junior School during the following Easter holidays, with the best results for the children. It is hoped that a branch of the International Montessori Society will shortly be actively at work. Mrs. Redding, of 70 St. Stephen’s Green, Dublin, has been appointed directress.

**Mysore, India**

The inaugural meeting of the Mysore Section of the Fellowship was held at the Maharaja’s High School,
This is a fiery criticism of the English public school system, combined with an able defence of progressive schools in England, written by one who worked as a master in both types of schools. The polemics of the first few chapters are a somewhat unfortunate prelude to an excellent discussion of what may now almost be called the traditional practice of the English new schools. The thoroughly sensible discussions on Freedom and Discipline, and on Sex Teaching, may be particularly commended. The last chapter is a detailed, although somewhat bald, account of life at St. Christopher's School, Letchworth, where the author is now teaching. It makes us look forward with all the greater eagerness to the book containing descriptions by their principals of twenty English progressive schools, which is to be published by Gollancz in May.
Modern European Educators and their Work.
Adolph E. Meyer. (Prentice-Hall, Inc. New York, 1934. $2.50.)

Dr. Meyer, Assistant Professor of Education at New York University, has given us a popular account in 250 pages of the careers, views on education and experiments of a large number of educational pioneers, such as Montessori, Badley, Lietz, Geheeb, Bertier, Decroly, Russell, etc. The book contains the kind of elementary information that will be of use to those, still a very large number of people, who know nothing of the new education movements in Europe. No real attempt at appraisal is made, and the difficulties that these pioneers had to meet are not ignored. The result is a one-sided, though attractive picture.

The Nursery School Association of Great Britain

Nursery Schools and Slum Clearance

Further developments in the Nursery School Association's campaign in favour of reserving sites for nursery schools on all new housing estates have taken place during the past few weeks. The Association has sent circulars to all Directors of Education and to Chairmen of Education, Housing and Town Planning Committees, urging upon them the necessity for reserving sites when the lay-out of the estates is being considered, so that, when it becomes possible to proceed with the establishment of new schools, difficulties in finding a suitable position may not arise.

In the circular to Chairmen of Housing and Town Planning Committees the Association says:

'The circular to Directors of Education draws attention to the mass of physical defect contracted during the pre-school years which handicaps the children from the very beginning of their school life: five years of age, and throws such a heavy burden on the School Medical Service. Commenting on the need for a suitable environment for the rapid social and mental growth which is so striking a feature of the pre-school years, the circular points out that 'the homes can supply the right conditions for growth without assistance. Even under the new housing schemes, the separate small home and garden will not command the amount of space needed by little children, and the numerous duties of a mother prevent her giving during the busy day the skilled supervision of her young children's development that they require. Until parental education is still further advanced, it is necessary to supplement the advice given by Health Visitors and Welfare Centres by actual demonstration of the best methods of nurture and care of young children. This the Nursery School provides.'

Interest in the campaign continues to grow and the demand for copies of the memorandum on 'Nursery Schools in Relation to Slum Clearance,' which has been issued by the Association, indicates that there is a growing appreciation of the importance of the nursery school in the educational structure of the community.

Copies of the memorandum may be obtained from the Secretary, Nursery School Association, 29, Tavistock Square, W.C.1, price twopence.

A new pamphlet on 'Nursery School Diet' has just been issued which should be of the utmost value, not only to those responsible for feeding nursery school children, but to parents and others who have the care of the two to six year olds. This pamphlet, which may also be obtained from the Association, price fourpence, contains clearly printed menus and recipes which make it possible to translate the scientific facts relating to food and growth into everyday practice.
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*Particulars and references from M. Chuning Pearce, B.A. Oxon.*

(Headmaster)
Our Contributors

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ETHNE Pryor is closely connected with the Hertfordshire Rural Music School and knows the Rural School Movement intimately. She is Chairman of the Executive Committee and she also teaches classes for adults and children in her own village.

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NEW ERA
The next double number will appear at the end of September and we are glad to announce that the support and encouragement received from our readers has made it possible for the Magazine to be continued as usual, from October next.
THE NEW ERA
IN HOME AND SCHOOL
A Monthly Magazine for Parents and Teachers

Entered as second class matter, September 23rd, 1930, at the Post Office at
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viii
ENFORCED leisure is to-day the lot of a large section of the population of the civilized world. We call it unemployment and deplore it as such. Yet leisure—the time and opportunity to follow for once the pursuits that we enjoy and activities of our own choosing—is not this the object of all our labour, all our toil? Why, then, since science has made leisure possible for all and the economic blizzard has enforced it on whole sections of our community do we exclaim against it so bitterly? The reasons are manifest. Unemployment is not really leisure and cannot be made so until three conditions have been fulfilled. In the first place, as society is arranged at present, most unemployment means the acceptance of a low, often a very low, standard of living. This distinguishes it in toto from the leisure that we mean when we speak of the leisured classes. Secondly, leisure without opportunities for its effective use in self-chosen tasks is a misnomer. To enjoy leisure, we must have the material means, the rooms, tools and accessories, without which a fruitful occupation is impossible. The fulfilment of these two conditions requires money, and depends upon economic factors. The third condition, on the other hand, lies wholly in the realm of education.

A new attitude towards unoccupied time must be built up. Leisure is desired, undreaded. Until recently all education had a purely vocational bias so that the ordinary citizen’s means of recreation to-day are the cinematograph, the professional football match and the daily newspaper. He has never been given the background or the desire (quite apart from the opportunity) to employ his free time in some more purposeful or creative way. This failing, due to an inhuman worship of work, nay, drudgery, which was characteristic of the nineteenth century, still dog us. Things may have improved since the three ‘R’s’ were considered the only proper education for the ‘Lower Orders’, but the false attitude remains and clouds our view of the whole of the artistic side of life. It is also reflected in the schools where the arts are still looked upon as frills and treated as the Cinderella of the curriculum. It is high time that some fairy godmother appeared to wave her wand and give them their rightful place of honour both at school and in after-life.

In this number of The New Era we seek to show in the case of one of the arts—music—what attempts are being made by the community as a whole to build up this new attitude to leisure. It is perhaps true, as some say, that music is the most universal of the arts. Long ago, Jacoby in Germany affirmed that no child is unmusical. Miss Bird declares in this issue...
that all small children have an unconscious sense of rhythm. Mlle. Martenot, through whose music kindergarten in Paris more than two thousand children have passed during the last twenty years, believes that all normal children are musically receptive* and show some creative power.

If this be so, music should be one of our closest allies in the attempt to discover a common cultural basis for the democratic culture of the future.

Knowing that she shared these views, we asked Dorothy Moulton Mayer, the other day, to tell us why she and her husband, Robert Mayer, have devoted so much time, money and enthusiasm to the cause of music in England. Her answer describes so well the new attitude we are seeking to create that we obtained her permission to reproduce it here:

‘Music has until recently been looked upon as a perquisite of the privileged classes. We have only just begun to realize that in fact music is everybody’s birthright. Improved methods of teaching have shown that the unmusical child is as much an abnormality as the child who is deaf and dumb, although the child’s natural gift for music must in many cases be revealed by the teacher.

Music and Democracy

‘Music should be and is potentially the most democratic of the arts. It acts as a great bond, drawing people together irrespective of class distinctions and taking away envy on the one hand and arrogance on the other. This has always been so. Pepys, for instance, engaged his servant because she had a pretty voice, and had her in to sing to him of an evening. The Elizabethan madrigals were often anything but well sung, we may be sure; but their singing brought the whole household together round the family table when the meal was done and the parts were given out. It does not matter whether the members of the Hertfordshire Music School play well or not; what matters is that they should have the joy and release that playing affords.

‘All forms of recreation are forms of release—the cinema, the theatre, games and athletics. But the best release is to be found in art and the easiest art for everyone is music. Everyone has a voice and everyone can sing; it is easier to sing a song than paint a picture. And music has a further advantage: it is something that several people can enjoy together.

Listening to Music or Making It?

‘England has already been won again to listening to music. Thanks largely to the wireless, music has come back again to the people. Everywhere where there are cheap seats, the concert halls are full. But listening is not enough: people must be led on from listening to making music themselves. Herein lies the peculiar importance of the school. So often, the child, isolated in his home, has no chance of hearing or making music. It is not the child that is unmusical, but the parents. The school, on the other hand, now takes it for granted that every child can and will sing; hence its great force and power. Just as the children are taught by the school to be clean, to wash their hands regularly, so the school must find some way of convincing the child that artistic culture is essential for the enjoyment of life, and because music is at once the greatest and the most easily come by of all the arts, it is the most valuable for the enrichment of his life. And by music let us insist that we mean the making of music.

‘I would like to see as the basis of musical education in this country the string instrument and not the piano. This would mean that all teachers should have a sufficient knowledge of the violin. There are several reasons for this; first of all, the string instrument is much more democratic than the piano since it is within the reach of everyone’s purse. Secondly, it is much more musical, since it needs tuning and therefore demands more musicality of the child.

*See A New World in the Making, pp. 130-140, where Mlle. Martenot’s methods of teaching music are described in detail (obtainable from the N.E.F., 8/- post free).
Then again, it can be carried about from home to school and from school to village hall. Finally, it is a team instrument and leads naturally to a combination with other instruments in the orchestra.

Music on Leaving School

‘One of the greatest problems is the carrying on of the musical life of the child after he has left school. It is true that he will always have a voice, that he can buy his pipe, his flute or his fiddle, and that then it will be his for ever and ever, and that thus he can go on making music for the rest of his life. But hardly anything is done to help boys and girls to go on making music when school is over. It is tragic that the State gives children so much up till then, but does nothing more for them when they are turned loose at the early age of fourteen. Cheap but really good concerts would do something to solve the problem. But music will not live again until everybody can help to make it as well as listen to it. To-day people who used to be content with their own musical efforts are now made discontented by the wireless. Not only do they refuse to go to second-rate concerts, but they encourage the second-rate performer so that everywhere small orchestras and small musical societies are ceasing to exist. Those of us who believe that it is not only the merit of the performance which counts, but more especially the joy and release experienced by the performers, must deplore the fact that though more people are listening to music, fewer people are making it. If music is to belong to everybody, a new attitude to making music must be built up. The Hertfordshire Music School and Miss Margaret James’s Pipers Guild show us the direction in which the community should go. But our hopes are centred above all in the schools which should become the nurseries of a new life of music for the people.’

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Absolute Music and the Teacher
ARTUR SCHNABEL

Absolute music, music as an independent art and discipline, is a modern European creation, a recent art form as yet not at all widespread. Limited up till now to the more cultured parts of Europe, it has developed best where the greatest scope has been allowed to individual growth. The cultivated European has carried his need for it wherever he has settled. It appears in all countries where modern European culture has been implanted and flourished. But even where it prospers it is far from being widely disseminated. It does not belong, for instance, to the compulsory school subjects like reading and writing, history or geography. Much time is indeed reserved at school for associative music; it is systematically used as an accompaniment to religious services, to songs, games and dances and as an aid to activities of all kinds. But music in its pure autonomous form is unknown to the school. It is, of course, another question as to whether the arts can be successfully taught in institutions giving a general education. Unspecialized schools with obligatory attendance must necessarily confine themselves to what the average pupil can grasp, to subjects which will be of use to everyone in later life; and it may be that what is offered by the ordinary school to-day is all that is needed by the average citizen for his leisure pursuits. If so, a special endowment must be the reason for requirements that are beyond the average.

There are many necessary human activities which can be performed by all. There are others, equally essential socially, which are only possible to those with special talents; and finally, there are acts of creation which are psychically essential as symbols of the forever Unknown and yet appear only by the grace of God in the depths of the human soul. "Great works of art cannot perish or become obsolete for they embody and unite all countries, all epochs and all human beings. Wherever human societies have become aware of and able to enjoy experiences of the mind, they have demanded symbolical presentations of these experiences, and creative art has appeared. Few are ever called to cultivate this territory; but these few have been enough and they have left us a heritage of great works in which the efforts of all lesser artists have been distilled and preserved.

But these favoured few have had to learn. To give vital form to their vision they have needed materials and tools, stone and chisel, canvas and brush, the control of thought and language. The resultant forms are many. But only deep visions, powerfully conveyed, endure and strike us as original even when their material and its treatment are demonstrably derived from former artists or have been brilliantly exploited by later comers. No one can learn to be a genius, but a genius must learn to handle his tools. He must have a teacher, who in his turn must have been taught. Teaching depends upon experience and tradition, doctrines and methods, adopted or devised, may be, to suit particular talents. But the problem of the creative artist's education need not be considered here. Genius is rare and education cannot destroy it. I shall therefore confine myself to the question of the interpretation of works of musical genius.

The Rise of the Professional Musician

With the development of absolute music as an independent art form the number of works belonging to it soon multiplied. As late as the eighteenth century, almost every professional musician was first and foremost a composer, while everyone who played music also wrote it. Every musician had a thorough knowledge of music and of the proper conditions of musical speech. Separation into composers and executants came later. As the number of works to be performed increased, the demand for performers increased too, and higher standards were required. At one time, churches and courts were the centres of musical life. But now music split up into many branches; besides the symphony, chamber music and music for the pianoforte were written, both of which needed solo performers. The modern concert world arose, music academies were founded and the impresario appeared. The fame of travelling virtuosi spread far and wide. But the greatest
Change was the increase in the study of music by the amateur. Children who learnt to play, and adults who devoted themselves to music, achieved an enhanced social prestige. Music, unlike the other arts, is neither representational nor informative—it imitates nothing and has no purpose in view. The gifted realize that music offers boundless opportunities of work, self-development and independent happiness: the un Gifted never suspect or discover its secret. Love of music is itself a sign of talent. Constant musical pursuits indicate a further stage of development. A musician is defined by his activity, not by its success; for music accepts all who crave for it, whether professionals or amateurs.

Public performances of absolute music are constantly multiplying and, technically, have reached an astonishingly high level. Meanwhile the gramophone and wireless are helping, rapidly and effectively, to meet more exacting musical requirements. There is also a growing demand for teachers. World conditions may temporarily restrict opportunities, but dissatisfaction in the musical profession is also partly caused by the unavoidable contrast between the extravagant hopes to which ambition gives rise and the very limited possibilities of actual fulfilment. Everyone who is called to be a musician (that is everyone who chooses the profession) dreams of a career that can only be granted to a few. He wants to live in a big city, where opportunities of hearing and learning and for fruitful rivalry are abundant. He is not content with a post, even a leading one, in which he must break new ground; nor is he willing to do pioneer work, since he feels it will keep him always on an unnaturally primitive plane. There are too many good musicians in the large towns and too few in the smaller ones. Many of the best executants do not give lessons even when they have reached an age at which external success should no longer be the exclusive attraction, and thus set a bad example to the younger generation. The latter do not want to teach or will only accept very gifted students. Pupils in their turn will only study with famous teachers. The result is that for the inhabitants of small or remote places, and for children and beginners in large towns, the only teachers are those whose talents, however worthy they may be, have never been properly developed. I admit that in music, as in all the more exacting professions, most of the work must be done by people whose ability seems small in comparison with those at
the top of their profession. But commercialism,
with its puff articles and mad starring of
individual performers, has introduced its
poison into the completely unsuited domain of
creative effort. Admiration, respect and advance-
ment should first be accorded to those
courageous and nameless musicians, who, while
knowing that nature has denied them the highest
regions of the art, yet strive with conscientious
devotion to reach whatever heights may be
theirs to attain.

Education of the Amateur

Amateurs who are not musicians need no
personal teacher. They educate themselves by
listening and thus developing the power of
sensitive appreciation. There is much talk
nowadays about the need for ‘understanding’
music. I fail to comprehend what that means.
Whoever loves music and gives time to it,
understands it too. The playgoer who knows
about grammar, syntax, style and phonetics
but who has no imagination, gets less out of a
fine play than one who, having no technical
knowledge, yet lives in the piece and judges it by
his immediate impressions. Nobody need boast
about his heroes or be ashamed of them. (The
believing faithful probably know more than the
godless unbeliever: it is again a question of apti-
tude.) Of course a knowledge of musical tech¬
nique will not hurt anyone who is emotionally
attracted to the art. But clearly there also exist
quite honest and enthusiastic amateurs who
have very little immediate feeling for music and
try to acquire it by a study of externals, a
process which can scarcely succeed. They are
then predominantly conscious of technical
qualities and measure everything by this stan-
dard. Such people may easily dub the greatest
genius a dilettante. But they too are music-
lovers and therefore welcome.

Amateurs who themselves make music need
personal teachers. Education by gramophone or
wireless (or correspondence) is absurd since the
pupil is then passive and remains personally
unknown to the teacher. Whoever wants to
perform absolute music must be taught indi-
vidually. Birth and environment still largely
determine those who take individual lessons. In
thickly populated areas and overcrowded
quarters, just as in the neighbourhood of stables
and cowsheds, there is no room and little
inclination. Recently the wireless has enabled
everyone to become acquainted with real music.
A statistical survey would be most valuable to
show how many people in different social
strata have thus become acquainted with it and
why they cultivate it. Even if it often leads to the
wish to learn a musical instrument, the fulfil-
ment of the wish is still most difficult,
particularly in the case of the bulky piano
which is nevertheless the most desirable instru-
ment for the amateur since it alone can play
many notes at once. At present individual
lessons are taken chiefly by members of the
middle and upper classes. (I leave the born
musician out of account for he will find his own
way.) Music lovers want to develop the love of
music in their children while less musical parents
have their children taught because they consider
music a necessary part of cultural education.
Should all children receive more advanced
musical instruction? The most gifted are often
particularly indolent and disinclined to practise
regularly. Indolence and disinclination are there¬
fore no proof of lack of talent. We should in
consequence boldly urge as many children as
possible to learn an instrument and make them
practise. The hardworking and the lazy should
both be taught, either until it is clear that they
will get no further or until they show and feel
themselves able to continue alone.

Amateur and Professional

To what degree of skill and facility can the
best endowed amateur with the best teaching
attain? When will the amateur reach a level of
achievement entitling him to become a pro-
fessional? The change over to a professional
career will doubtless nearly always take place
directly this question arises. But the likelihood
of an amateur getting so far is small, for as a
rule, the professional musician is recognized
before the beginning of his training, aptitude
showing itself at a very early age. How far
the amateur performer can go does not only
depend upon the extent and nature of his
abilities, for he will sooner be able to reach a
high level where a fruitful and cultivated
musical soil already exists. Skill and critical
ability are influenced by the creative power of the
environment, which will inspire, strengthen
or cripple his efforts according to whether
it is in ascent, at its zenith, or already in decline.
In a cultivated environment, the best amateur can rise to astonishing heights, though the best artist will always stand proportionately higher. (The two cannot be compared owing to the difference in the amount of time they each devote to music.) In such surroundings the amateur will find stimulating and many-sided teachers; he will have an active musical life and will be able to sharpen his critical faculties and improve his standards. He will learn to be not only a capable sight-reader but also, or rather first, a trustworthy and experienced interpreter turning his conceptions into sound in accordance with his temperament, while remaining faithful to the text. Real works of art can be performed by people of all temperaments without distortion; the obvious necessity of accurately reproducing the text is in no way a denial or limitation of personal freedom. Much in a performance that is often considered the expression of the artist’s personality is only a sign of carelessness or an unfortunate mannerism. The real artist differs from the best amateur chiefly in power of concentration, quality of style, depth and brilliance.

The amateur student working in musically virgin soil is as much a pioneer as the professional musician who is invited from a foreign country to till and plant it. Although the best artists can often be persuaded to spend a short time in new territory and act as a source of inspiration, there are both material and moral reasons why they are never likely to be the first to settle in such lands. As virtuosi they require cultivated audiences in a large number of towns not too far apart; while as sought after and experienced teachers they are entitled to the best professional and amateur pupils. Virtuoso, teacher, music-lover and student are mutually interdependent and together form the rich and varied world of music which can only retain its vitality where there is proper balance between conservation and progress and a deep respect for both. But who shall determine the balance? Where is the golden mean? The battle of the
generations lasts for ever; youth will always seek to dethrone the gods, even the true gods, while age will defend them, whether true or not. Apart then from unusual exceptions, the most suitable leaders are those who are neither too old nor too young; for they are best qualified to secure agreement and discipline, combining as they can wisdom and fire, disinterestedness and passion, modesty and self-confidence. They should also be able to lay down certain fundamental rules which should be flexible and broad enough to have enduring validity and be universally applicable. Fundamental rules only, of course, such as would clearly determine the point of departure, describe the proper attitude, and erect reliable signposts for the first stage of the journey which itself has many different paths, there being, as in chess, a variety of recognized openings. These rules would in short point out broadly what is essential in any approach to music and what is dangerous, inexpedient or pernicious. (I have already stressed the fact that genius stands above the schools: since the genius is born a giant, his teachers are often in comparison mere pigmies.)

Authority and Musical Interpretation

But have such leaders existed? Have they out of their varying opinions built up a basis of commonly accepted doctrine? Indeed does such an accepted body of doctrine exist at all? In the case of the mechanics of music agreement has long ago been reached. There are definite keys, intervals, scales, tonics and sevenths, that form its basis. There are agreed harmonic, metrical and formal relations. The ‘well-tempered’ scale and the interval system have not yet been dethroned. Were they to be so, the wonderful works based on them would be no better than museum pieces. Within music’s frontiers, accepted as they have been up to now by all composers without remonstrance and almost without thought, there exist treasures of the most varied and contrasted sort, all of which exhibit one common characteristic, the employment of a single language. For music, like architecture and sculpture, speaks one language wherever it is found. It is therefore a mistake to distinguish such works of art mechanically according to their land of origin, a proceeding which is customary and proper in the case of literature, though even then completely false deductions are often drawn from it.

For the interpretation of absolute music, however, no such accepted basis has as yet been found. Interpretation, as I have said, comes much later in the history of music. We do not know how the great composers played their own compositions. Contemporary descriptions tell us little. The one thing they have occasionally demanded from interpreters can be safely embodied in our basic doctrine: free movement on a firm foundation. The art of interpretation is a creation of the nineteenth century, with its analytic and descriptive tendencies, its emphasis upon measurement and book learning, and its belief in mass production and competition, an age of astonishing technical progress, which, after trying to measure spiritual things in terms of utility and profit, eventually lost its balance and sought salvation in trusts, standardization, uniforms and dictatorship. How could such an age fail to bring ruin and confusion upon the world of art? It may seem as though I were joining in the cry for a dictator by demanding authority in the domain of musical interpretation. But the reverse is true: I seek protection against the dangers that create dictatorship. The interpretative art must achieve independence by providing an impersonal and enduring account of its essential character, expressed in simple and comprehensible terms. This should be the joint work of all concerned. But is agreement possible? And who are concerned? First come the professional musicians who bear the ultimate responsibility for musical education, then the directors of music schools, and finally all teachers and artists of established reputation. Views must first be exchanged between different groups in the same country and then between different countries. Is this suggestion Utopian? Are not musicians and artists quarrelsome, peculiar, jealous and conceited? Such libellous generalizations are in fact utterly unjust to artists, who are by nature idealists, and since we only ask for the agreement of successful musicians we can count upon their complete disinterestedness.

What should be the first demands of this imaginary body? For an end to the many-sided variety which they have helped to create? Certainly not! We seek from them a description of the elements common to all music and an
agreed confession of faith in these. Unanimity (and decisions of this body must be unanimous) would, I believe, easily be secured on one point—the nationalization of all musical institutions undertaking the training of professional musicians. Agreement could probably be reached on other points, such as the registration and inspection of all private music schools and the restriction of the right of teaching to those who have passed a qualifying examination. Here a first difficulty arises. Let us suppose that a musician who has worked for many years as a virtuoso and has never contemplated teaching suddenly acquires the desire to teach. He is a man of forty, let us say; must he go back to school again? That would be absurd. The teaching diploma must be granted without examination to real artists, even though they are still young. We should be only too glad that they are ready to teach. Compulsory registration and examination are intended mainly for institutions and teachers concerned with the beginner, and especially for those who teach children and amateurs and whose work lies in distant suburbs and small towns. In such cases, when anyone may teach, there is a danger of teachers taking their responsibilities lightly or treating teaching as a purely business matter. A compulsory examination would protect beginners from abuses of this sort.

A further examination should also be necessary for permission to teach ‘light’ music of a purely recreational kind. The possessor of a diploma for ‘light’ music should be required to take another examination if he wishes to take up more advanced teaching.

What form should the examination take? This must also naturally be decided by our group of trusted musicians. Both attitude and performance should be examined. As regards attitude, everyone should be expected to show a love and respect for music, should be patient and yet capable of enthusiasm, serious but not pompous, persevering and yet flexible, confident but not boastful. Such candidates are none too common as yet, largely because of their training. A better balanced education would instil into them such an attitude from the start. The level of performance is not so easily tested. It is due to nature and nurture, to fortune, knowledge and will. Knowledge of the language of music can be presupposed, and the ability to convey this knowledge in a stimulating way must be there. But the technical elements of the interpreter’s art, such as articulation, punctuation, the proper handling of the instrument, and the right use of the body, should not be taken over uncritically from any one of the many methods at present in vogue. The future teacher should have travelled along as many paths as possible on the way to his goal and have developed a musical sanity and good sense which will enable him to judge which methods have promise and which have none. One element in the examination should thus be a critical comparison of different methods.

**Abandoning Drudgery**

How ought one to prepare for a performance? What system of ‘practising’ should be recommended by the authors of our fundamental rules? They would all agree that practising should never be mere drudgery; it should always be a pleasure, a creative effort. From the first, too, it should be a performance, or at least a rehearsal, of the whole; a passing from the whole as conceived to the whole as executed. The original conception and impulse must always be present, the outer ear listening to be sure that the intentions of the inner ear are being carried out. This method appears harder than it is. As a rule, we are made to practise over again in the case of each fresh work passages we should, and easily could, have learnt to execute long ago, once and for all, had not the last century given us a superstitious fear of technical difficulties. The same runs, scales, arpeggios and figures appear in all compositions, with the partial exception, perhaps, of contemporary music. Once mastered, they should always be at our command. How much time is wasted to-day in the daily gymnastics, the purposeless and quite impersonal exercising of individual portions of the mechanism, with its continual starting at the beginning again, which is as useless as it is dangerously boring! Such gymnastics are still the rule, and their advocates warn us against emptying them of meaning by the habit of reading while practising. Yet an experienced runner does not begin his daily practice by walking slowly! Besides, who, nowadays, has time to begin continually at the beginning again? Courage is the most important
virtue in life; courage, not presumption. Mechanical perfection, absolute reliability, are impossible for the most persevering plodder. The attempt to improve an interpreter's technique through his mind is more likely to succeed than the reverse procedure.

The first reading of a piece of music should be a real rendering. The finer the piece, the greater and more varied its interpretative possibilities. Without departing from the text, every rendering can and should differ from every other, from the first bar to the last. Nature guarantees the variety; the musician's scruples, the textual accuracy. The analytic, 'scientific' spirit of the nineteenth century has given birth to innumerable panaceas. There are books to teach everything; how to become talented, how to achieve happiness and success. Some say that without exact anatomical knowledge no one should sit down at the piano. Joints, muscles, nerves, are photographed, tables drawn up, calculations made. When you have taken it all in you may perhaps be ready to play a sonata by Mozart. Every sort of system from the most primitive and blatant materialism to the most vapid metaphysics has its advocates and supporters. There are dozens of mutually hostile theories advocating this or that method of breathing, or of playing, and every sort of touch. I cannot deal with them here, any more than I can go into the finer aspects of the art of interpretation which cannot themselves be taught. Our agreed fundamental rules should put an end to the anarchy which exists at present in the theory of music teaching.

In conclusion I will relate a characteristic incident. Not long ago I was asked to give advice about a girl of ten who was brought to play for me. Her teacher inquired as to which method she ought to employ in the future, the 'rhythmic' or the 'emotional'. I did not understand. Accordingly she asked me whether I had not heard of the two methods of teaching music, the one of which insists upon strict time being kept while the other allows the pupil to play as she feels. I had heard of neither—and was profoundly shocked.
Broadcast Music in Great Britain

ADRIAN BOULT

All over the world, wherever civilization has shed its mingled blessings and horrors, it is now possible to hear music. Since the B.B.C. began regular transmissions to the Empire, some eighteen months ago, classical music has been penetrating to many a corner of the Empire where the nearest concert hall or opera house is hundreds of miles away. Nearer home, too, music makes its way into millions of ears which, until the advent of broadcasting, heard nothing better than the minstrelsy of the pavement. Music, in a word, is no longer a luxury of the few, but part of all the world’s everyday life. Whether mankind, or the cause of music, whatever that vague entity may mean, is as yet benefited thereby, is still an open question: musicians especially are apt to say an emphatic ‘No’. ‘Listeners,’ they insist (the official term of all who sit about loud-speakers or with earphones clamped on their heads), is a misnomer; nine hundred and ninety-nine in every thousand, they are convinced, are merely hearing music, not listening to it—are, as yet, incapable of listening to it.

Hearing and Listening

Even the pessimists, however, do admit that such a state of things cannot endure for ever. Slowly, but quite surely, hearers are becoming listeners, and many a man and woman in whose scheme of life music had no place, who neither missed it, nor knew that they were missing anything, are now at least beginning to find it an enrichment of their leisure with which they would not easily dispense. The wise people, especially, who avoid a surfeit beyond their powers of digestion, choosing such musical fare as they know will appeal to tastes which are only now being formed, find that they do learn, little by little, to find pleasure, and at last something on a more exalted plane than mere sensuous pleasure, from what would, not so long ago, have meant nothing to them.

A Survey of Music

Broadcasting programmes everywhere have all along been planned to that end. It has been no irresponsible stream of music which has been let loose upon an eager, if unready, world. The schemes are similar in all countries, and what the B.B.C. is doing may well be taken as typical; that their public is more unmusical than in other lands is the merest myth. No nation, unless in prehistoric times, has ever been musical in the sense that the common man delighted in the best that the art could offer him, and Britain, so far as history reveals it to us, has been no more heedless than its neighbours. With the great body of public indifference in view, then, the B.B.C.’s programmes of music have been planned for years past in this way. Taking a year as the size of the mould in which its programmes are to be cast, each is filled with as comprehensive a survey as possible of all that is best in the world’s music, old and new. Orchestral music is presented (1) at the Symphony Concerts, a series of some twenty given weekly before an audience in the Queen’s Hall, during the winter months, and broadcast, as a rule, on the National wavelengths; (2) at the August and September Promenades, eight weeks of daily concerts, also in the Queen’s Hall, packed with perspiring enthusiasts; these are broadcast alternately by the National and Regional transmitters; (3) at a weekly Sunday evening concert from the studio, broadcast on the Regional wavelengths; (4) by relaying concerts from many outside sources, ranging from the Royal Philharmonic Society, the Halle Concerts in Manchester, and the Bach Choir down to hotel and restaurant bands and picture-house organs; (5) by other studio concerts in which a similar range of music, from grave to gay, from serious to flippant, is regularly covered. Chamber music, vocal and instrumental recitals, choral music of every order, and, by no means least important in its popularity, military band music, are all offered as part of the scheme, by the B.B.C.’s own resources, and by levying toll on public concerts elsewhere. Advantage is taken, whenever possible, of visits by distinguished artists, to give listeners the chance of hearing them, either by relaying their recitals, or by bringing them to a broadcasting studio. Especially during the
To explore without so kindly, and withal so wise, thanks to him, many a happy listener is now at home amid beauties he would never have dared to enter, and where none need find himself to be complementary one to another, so that, in the course of a year, listeners who wish to can have a wide survey of the whole range of music. Each year’s programmes, moreover, are laid out with an eye to what has already been done, and, while overlapping is avoided as far as possible, a judicious repetition is arranged side by side with adventures into new territory. No stress is laid on the educative influence of such a methodical scheme: it is all presented in the name of entertainment, and the education which is embodied in it is left for the listener to assimilate into his own aesthetic consciousness. He is doing so; there is evidence of that in many directions.

**Learning to Listen**

Education in music, however, has for years been instilled in a wholly admirable way by Sir Walford Davies, and it is due to him, more than to all other broadcasting activities combined, that the man in the street now has some understanding of what music can mean to him. Sir Walford’s talks to ‘the ordinary listener’ have done more than could be set down in words by any but himself, to make it clear that even serious music is a domain which anyone is free to enter, and where none need find himself bewildered by its many paths. He has shown, in the simplest and most inviting way, whither they lead, and what lies at the end of each; thanks to him, many a happy listener is now at home amid beauties he would never have dared to explore without so kindly, and withal so wise, a guiding hand.

But in his broadcast music lessons to schools, Sir Walford has done even more to train a new generation of listeners. The introductory pamphlet to his course for the 1933-34 session sets forth the ideals he has in view and the methods by which he guides young listeners towards them, with his own inimitable clearness. Beginning with an outline of the general aims of the course, Sir Walford says:

“The broadcast music lesson, to be generally serviceable, presupposes deep-seated alliance between teachers on the spot and the speaker at the microphone. The aim of the latter is, in effect, to become a serviceable assistant to the musical staff of every listening school. He can only offer things calculated to supplement, fortify, and, if possible, endorse and extend, the work done by the teachers. For this reason, the basis of the broadcast lesson must remain musically very broad. It can deal only with basic matters in vital ways in order to fit in with the work of all schools.

‘Here, speaking generally, the fact should be faced that the music-teaching in some schools, from the highest to the humblest, is not yet musically effective in its results. It improves apace; but it would be interesting to know, for example, how many educated rulers of the people—how many Judges of the High Court, how many Members of Parliament—to-day could read and hum at sight the very simplest tune, and say what they thought of it as a mere melody, whether they found it in good or bad taste musically, and why they found it so. Yet we all know that a little systematic teaching, from the infant schools onward, could have ensured that the whole population (except the very small percentage of tone-deaf) would be able to read any melody of the degree of difficulty of ‘God Save the King’ or ‘Rule Britannia’ as easily as the poem; and the intelligent would be easily able to say what they thought good or bad in the tune (as they could, e.g. say that the words ‘glorious’ and ‘over us’ in the National Anthem do not really make a good rhyme). It is the concern of all to realize that, in this present generation, there need be no child in the remotest village school who cannot have practical help, while in school, in enjoying and reading a simple good tune at sight and understanding the build of the tunes it sings. The rules of the game of music are astonishingly simple.

‘Realizing that broadcast help towards the hearing, loving, and understanding, of good music and the pursuit of good team-practice will be in keeping with the aims of all schools; that sol-fa-taught children cannot too early carry their syllables to the staff, nor staff-taught children be denied the power to recognize by name the place of a note in the related order of its scale and key; realizing further, the astonishing truth that if every school in Britain had a good wireless set, and used it with discrimination, while accepting such broadcast talks on music as are likely to be helpful in the special circumstances of the school, it would be possible within a few years and with little expenditure..."
of school time to ensure that our entire population would be able to read simple music at sight as readily as they read an advertisement poster and also to exercise some power of criticism in regard to its musical quality; realizing also that toward this end those of us who are working together at the moment must try to agree upon practical ways, week by week, first of releasing every child's natural love of rhythm, love of a good tune, and love of team-utterance, and next of giving them sound guidance towards the power to read and write simple melody up to capacity—realizing all this, the following extended plan of action is suggested for use at choice, both in musically equipped and 'musically' unprovided schools:

I. Introductory Lessons (Tuesdays 2.30-3 p.m.)

These contain:
1. Song of the week to be learnt by the ‘four-lap’ plan.
   (Lap 1. Song played in the studio, scholars following course of the melody in their manuals.
   Lap 2. First line studio, second line schools, etc.
   Lap 3. First line schools, second line studio, etc.
   Lap 4. All sing all.)
2. Rhythms and phrases of the week to be sung by the method of Echo and Reply.
3. The general subject-lesson of the week.
4. The listening to one short piece (played or sung) each week.
5. One song sung from the Manual.
6. Playing of scholars’ tunes of the previous week.

II. Advanced Lessons (Tuesdays 3-3.30 p.m.)

These contain:
1. Reading practice (more advanced) by ‘cross-country-run’ method and song of the week.
2. General subject-lesson of the week, using rhythms and phrases where applicable.
3. Listening to one short piece with discussion of points of design and construction.
4. Playing of scholars’ tunes of the previous week, with criticism.

III. Concert Talks (Fridays 3-3.30 p.m.)

These contain:
1. A short piece as ‘overture,’ generally preceded by a three-minute talk. (When possible, this piece will be heard without comment among the miscellaneous pieces in the previous week.)
2. (a) Set pieces of the week (by the composer of the term).
   (b) Talk on the set pieces.
   (c) Chief set piece repeated.
3. Additional items heard without comment.

Aims of Introductory Course

‘The chief aim of the Introductory Course is to quicken the natural joy in the response of the small child. There is no thought of superimposing music upon them from without, but only of releasing the power of imagination along natural musical ways. A shout of joy very easily can turn into a scrap of tuny music, and this into a fugitive phrase. If such a phrase be repeated for sheer good spirits, it is already half a tune! Similarly, a little child, crooning to get its dolly to sleep, may as easily drop into a scrap of sing-song lullaby; and this also, if repeated for love, is half a tune. It seems indeed easier for a small child, with a little practical help, to make up a tune than to write a school exercise in English grammar, however simple; easier to utter itself naturally in a little string of related sounds than in a little string of related words. However that may be, it is certain that rhythmic utterance, whether of sounds or words, brings rhythmic release to the child; and rhythmic practice brings rhythmic sensitization both to the team and the individual.

In these first stages then, the practical course would seem to be:

1. To let the repetition* of rhythms and phrases with an imaginative tinge in them—e.g. the rhythm of a lullaby, of a march, of a steam-engine, of a dance—be habitual both for the team and the individual.
2. To let the love of pleasing sounds deftly put together—the perfect fourth, for example, and a little scale within it—find outlet for itself in small phrases made up, repeated, and worked into little tunes by the children themselves.
3. Concurrently with (1) and (2), the unceasing habit of the classes from the first should be to look with the eye at every phrase as it is heard by the ear, whether singing or merely listening.

‘The Advance Course on Tuesdays is planned on the same lines as the Introductory, except that more skill on the part of the children and more attention on the teachers’ part are taken for granted, and a more detailed study of musical design is attempted. The love of rhythm, of euphony, and of design in melody, gradually grows in confidence and grasp. The 5 per cent musically gifted children will begin to emerge; and where possible special encouragement in the exercise of personal skill may be given to these, out of school hours. If one plays the violin well and another the piano, these two can, for example, every week carry the output of the school a stage higher by making up diminutive suites of their school melodies for violin and piano, and can play the same at their ‘form concerts,’ which can easily be arranged for any Friday afternoon, say, for twenty minutes after school. Throughout both courses, it can scarcely be too strongly urged that the phrase heard should be so inseparable from the phrase seen on the stave that reading and writing of rhythmic melody become never again a bugbear to the senior school. If they can, instead, become easy habit in the junior school. Let it be borne in mind that musical understanding begins with the joy of relating two or more notes to one another in a phrase; then two or more phrases in a tune; then two or more tunes in a piece; then two or more pieces in a sonata; and so-forth, ad infinitum. A tone can be to a child’s imagination what a star is in the heavens, and a

*The idea of repetition should be coupled habitually with the idea of perfecting.
The value of notes expressed by gesture at the Cours Martenot, Paris

phrase can be like a little constellation of tones taking shape and being recognized by the exact relation of the tones (like the stars) to each other. The mind of man can be as full of music as the firmament is of heavenly bodies. Let the child discover its own minute designs in order that it may learn to love to gaze into the mental firmament of Bach and Beethoven and all other wonderful minds with more and more intelligent enjoyment as these come within its ken.

There are two aims which may be thought of as predominant in the Friday Class:

(a) To quicken musical memory.

(b) To quicken the ear for beauty of design, chiefly for balance in design.

It is well to realize that the sounds of music come at us, in a procession of phrases. The aim of the Friday Talks is to enable the listening pupils to sort out the phrases for themselves as they are handed in one at a time in performance. Imagine your pupil standing at the door of an empty room—his or her own receptive mind—with Broadcasting House handing in fine pieces of musical furniture to them over the ether, a piece (or phrase) at a time! It is for the listener to learn to receive them, memorize them, and pop each piece quickly into its appointed place, as it is handed in, so as to be instantly ready for the next to follow. At the end, memory must be in possession of all of them, and enable the listening mind to say: 'That's a finely designed room! I like that!' Now if this aim in the Concert Talks be kept in mind by central and circumferential teachers alike, no other specific preparation will be needed except hearing the pieces; if by no other way, then by the constant use of repeated records on the home or school gramophone. All sound teaching and all good listening are in themselves good preparation for the Concert Talks. Only the teacher on the spot will know how to dovetail them into their own curriculum.

Lessons on those lines have been a regular part of the B.B.C.'s service of broadcasting to schools for ten years, and that they have already gone a long way towards making young Britain musically minded, is beyond doubt. How confidently that is now taken for granted by those who have music's interests at heart may be gauged from such a sentence as this, taken from a book on another aspect of the art. Speaking of the difficulties of contemporary music, Mr. Gerald Abraham* says: 'Whether or not it needed a Schubert to invent the first four bars of 'Die Forelle,' it certainly needed no Schubert to follow them up with the next four. Any Walford Davies student could have done it as well'.

* This Modern Stuff (Denis Archer).
The Influence of Rhythm and Tempo on the Child

M. and G. MARTENOT

At a recent conference on New Ways of Presenting Music to the Child, we discussed the influence of rhythm on the pupil and the part which rhythm could play in general education. The keen interest shown by some teachers and parents and the inability of others to understand this vital question have led us to develop and elaborate the theme.

Rhythm and Living Organism

Every living organism is continually giving out and taking in energy and this process must necessarily be regulated. It is the function of rhythm to act as a regulator. ‘Among the Greeks rhythm played its part in games as well as in dances, in athletic training as well as in the complicated evolutions of the Chorus’.—Today we must recognize its influence in all human activities.

‘Each organism,’ says Bergson, ‘instinctively needs and shows periodic divisions of its own rhythm’—whatever that rhythm may be. These periodic divisions constitute the tempo or movement in which the rhythm is expressed. (It is quite simple to record it by using a metronome.)

Tempo and its Influence

In this article, we are particularly concerned with the influence of tempo on the mental, emotional and physical states of the individual, and we propose to show how it can be used in actual practice, and how variations in tempo will serve to quicken or slow down the child’s activity.

If rhythm in general reacts on the human organism, the influence of the tempo in which the rhythm is embodied is even stronger. When we hear Schubert’s Military March, our whole being responds: we feel elated at once. But, on the other hand, Chopin’s Funeral March immediately saddens and depresses us. But if, without modifying the rhythm, at all, we change the tempo of the Military March to that of the Funeral March, it too will depress us; while the Funeral March played at a quicker tempo will in turn become enlivening. This in itself is sufficient to prove how much more powerful the influence of tempo is than that of rhythm.

‘The tendency towards alternating rhythmic movement is deeply rooted in the chemical and dynamic metabolism of all living cells’. Consequently rhythm and particularly tempo react very strongly on the physical and mental condition of the hearer.

The Rhythm of Our Minds and Bodies

‘Time is not external, it is within ourselves. We record its duration by organic vibrations, occurring at regular intervals (generally without our being aware of them). Yet at certain moments, under the influence of particularly lively rhythms, these vibrations contract our muscles, compel us to clap our hands and beat time with our feet.

It is, however, essential to realize that quite independently of any external stimulus each organ has its own special rhythm (such as the rhythm of our heart beats, respiration and other organic functions) and within its own rhythm a different tempo.

The average tempo of all these rhythms gives us each what we may call our individual tempo. This tempo will, of course, vary with each person and with age and temperament. Children, for instance, have a very different tempo from ours: their movements, their breathing, their pulses, are all far more rapid and therefore their individual tempo will be correspondingly quicker than that of adults.

It is of the utmost importance that all teachers should take this physiological condition into account whatever type of work they set the children to do. Further, our experiments have proved that if rhythm, in the form of gestures or spoken words, is introduced into any lesson, the physical and mental states of the children will undergo a change.

The Influence of Tempo in the Classroom

Any form of work in which the rhythm is slower than the normal individual tempo of the child will slow down his activity, decrease his energy, soothe his nerves and induce receptiveness. On the other hand any form of work in which the rhythm is faster than the tempo of the rhythm and le Rythme du français déclaré.

1 Janet: Traité de Psychologie.  2 Jousse: Archives de Philosophie Vol. 2.  3 Landry: La Théorie du Rythme et le Rythme du français déclaré.
child will noticeably increase his energy and activity and encourage spontaneous self-expression. To sum up: A slower tempo than his own will tend to make the child receptive; a quicker tempo than his own will tend to make him give out energy.

When any living organism comes into contact with a rhythm from outside itself and the two tempi are sufficiently similar and belong to the same series (either binary or ternary) there is a mutual attraction between the hearer and the rhythm heard. But if the two rhythms are really dissimilar and belong to a different series, conflict is bound to arise and as a result the equilibrium of the hearer’s own rhythm will be disturbed. But as we shall show it is quite easy to slow down or speed up one or other of the tempi so that equilibrium is restored.

Some Practical Examples

The following examples are taken from the regular course of instruction which we give our students in training, so that they may discover, first, their own tempo, then, that of their pupils. Thus they learn to make use of the vital regulative principle within themselves. Anyone who practises the following exercises can acquire the power of speeding up or slowing down his own tempo at will without running any risk of repression, and he will be able to adapt his faculty to the rhythm of circumstances.

Example 1. You are feeling impatient. Observe your inner tempo. You will find that it is very fast. Relax, breathe deeply, and gradually slow down your rate of breathing. In a few seconds you will have recovered your usual tempo and therefore your usual state of mind. The memory of a particularly soothing piece of music, of a landscape, of a picture conveying a feeling of peace often helps people of certain temperaments to slow down their tempo.

We have established the value of this method over and over again in our personal experiences with our pupils. In fact we have often succeeded in curing cases of nervous tics and recurring spasms of cramp, even where medical treatment had failed.

Example 2. Suppose you are tired, glum, lacking in energy. Observe your tempo and you will find it slow. Put your hand on your knees; with the forefinger of your right hand press lightly, following your own tempo. Then press progressively faster and accentuate the beat more and more. You will soon find that your desire for action re-awakens as your tempo rises. Except in pathological cases, the whole organism responds and you will shake off your sluggishness.

Controlling the Individual Tempo

Only when you have tried some of these experiments on yourself will you understand to what extent tempo can affect the quality of children’s work.
May–June 1934

THE INFLUENCE OF RHYTHM AND TEMPO ON THE CHILD

and so influence whole classes entrusted to your care. Only, too, when you have acquired this knowledge and mastery of yourself will you be able to appreciate the importance of this factor which can bring so much good, so much joy—one might even call it 're-harmonization'—to those about you.

The individual tempo, consciously controlled, becomes a thermometer of each pupil or of the whole class: the teacher can send the mercury up or down at will and thus control the temperature of the class for the benefit of the children in it. Everyday experience over a number of years has proved the truth of this fact.

For instance: your class suddenly becomes excited. If you try to cut the excitement short with a sharp reprimand or a punishment you will undoubtedly succeed in producing an immediate effect. But it will only be an external one: the repressed excitement will cause trouble in the future if it does not explode into uncontrollable riot once the lesson is over.

What can you do? If they are doing individual work turn to something different, if possible, to oral group work. Joining in the activity of the class yourself, you should adapt your words, your gestures, to the quick tempo which prevails. Then gradually slow down the rhythm of the group reading or recitation. You will find that the organic tempo of every pupil will correspondingly return to normal and you will thus restore peace to your class. If there are only a few children in the class the teacher need not change the work but need only gradually modify his own actions; slow up his gestures, use soothing words, pronounce them slowly and distinctly, in a graver, or we might even say, a more emotional, confidential and mysterious tone in order that the class may recover its harmony. If you feel that the children's attention is wandering, do not become peremptory. Put more life into your voice by clear, sharp enunciation. Put more life into your gesture. The whole class will soon be revivified.

If their lack of attention is due, not to a sort of general apathy but to external distractions or fidgeting and talking, a sudden cessation of the teacher's voice (even in the middle of an explanation) will have an immediate effect on the tempo of the children and will be of far more use than threats and reprimands.

The human body is like a marvellous wireless set. It both sends and receives waves, and our thoughts, just as much as our words and movements, have, for those around us, an importance which we must not ignore. We have dealt with the relations between teacher and pupil; but do not let us forget that we must be sensitive to

Drawing and modelling at the Cours Martenot
all the reactions of the children, favourable or unfavourable. The surest guides to their state of mind are not their words but their tones of voice (its softness or harshness) the tenseness of their bearing, their movements and their handwriting. That is why we insist that the student should pass a long term of probation observing classes of children so that he may be able to study their deep-seated reactions, for the finest and most learned psychological treatise will never teach one as much as the study of the child himself.

The Qualifications of the Teacher

Born teachers make use of all these methods instinctively, but how many university graduates, armed with certificates and diplomas and an immense accumulation of learning, are really able to make any contact with their pupils, or to create that aura of sympathy which can completely transform a class? We have known many people destined for the teaching profession and extremely highly qualified in all the subjects which they propose to teach. Intellectually they were very well prepared for their task, but they were quite unable to establish sympathy between themselves and their pupils. We have listened to teachers giving a lesson to highly-strung, over-excited children, and talking so sharply and with such nervous liveliness that they only encouraged the abnormal restlessness of their pupils.

But contemporary psychology has made so much progress that it is no longer sufficient for the intending teacher merely to accumulate a hoard of facts. It is of the utmost importance that he should become aware of himself, understand his own reactions, feel the pulsating life within him as it responds to the events of everyday life, so that he may be better able to appreciate the reactions of others.

In practice an understanding of the way in which variations of tempo may be used provides one of the simplest and most natural means of putting those who are entrusted to us as pupils in harmony with the work which they are set to accomplish, whatever form this work may take.

A musical phrase sung and expressed in gesture. The Cours Martenot
The World's Folk-Songs and the Music of the Future

M. HUMBERT-LAVERGNE

We learn most of the musical needs and gifts of the child as we listen to him improvising for his own amusement. There are actually children of three and five who use not only the pentatonic scale but even scales unknown to ordinary notation and containing jumps of augmented seconds in unexpected places. Yet as soon as the child begins his musical education on any instrument, his native gift of improvisation dwindles gradually to an unconscious mimicry of other styles. And if, some years later, he begins to compose himself, his work often shows a Mozartian influence expressed in a strict rhythmic formula and almost always in four-time.

The Child's Spontaneous Expression

The child who sings spontaneously seems to seek great freedom of expression in his outpourings; sometimes very complex rhythms with long stretches of \(\frac{5}{7}\) and \(\frac{4}{4}\ 6\) appear to suit him best. We have often made the experiment of reducing this complexity to a formal rhythm but the child is always disconcerted by it. 'No, that's not what I meant,' he says, doggedly playing or singing over exactly what he has discovered for himself. Unfortunately, this rhythmic elasticity lasts scarcely longer than the varied tonality resists a conventional musical education. Little by little the early compositions come to astonish their own composers who seem almost ashamed of them, though they proudly display later pieces which are nothing but characterless copies of their favourite composers.

We have also noticed that when a very young child listens to a record of Hindu or Arab music which contains quarter tones, he does not seem in the least astonished, but on hearing it again after being taught Western music he will say: 'that's out of tune'. On the other hand, if side by side with a traditional musical education, he is often presented with Eastern and Far Eastern melodies (and this can be done comparatively easily by means of gramophone records which come from all parts of the world and allow the interchange of music between the most distant countries) he will not lose his native gift for fluid, spontaneous rhythms, and will sometimes be able to safeguard his innate originality in spite of the daily assimilation of the classical style.

Whatever we may think of modern music, we must admit that we owe to it an increased flexibility of tonality and rhythm which cannot fail to be of the greatest value to later generations. As freedom of expression is gradually gained, perhaps an era may eventually be reached in which no one will be afraid of expressing in music the fullness of his own personality. It will then be no longer necessary for us to repudiate the study of classical music, but only to analyse it as one might turn the pages of a history in order to read of the musical evolution of the race. But this study will never petrify our expression by forcing on it formulae which are foreign to our essential self.

Music and Folk-lore

For thousands of years, all over the world, man has sung, made music out of wood, strings and metals, breathed music into straws, reeds or shells, struck hollow trees or the hides of animals stretched taut. Even nowadays, in many parts of the world, hunting and fishing, the corn and the grape harvests, offer occasions for festivals of music and song in which the creative genius of the people flows with splendid freedom into the most varied rhythms and harmonies. How unfortunate it is that musical education tends to shut out so carefully this inexhaustible symphony of living music which comes from the very heart of nature herself and is continually enriched by new creations, in order that the child, seated before his
‘well-tempered’ piano, may be in contact with three centuries of music, the musical culture of Western lands alone, and a strictly limited type of musical composition.

Our European folk-lore is in danger of extinction. It seems likely to be suffocated by elementary education, the Press, and the inane tunes of the dance hall. Our country folk are forgetting their ballads, their songs and folk dances. Is this not partly due to the unbelievable rigidity of our musical formulae for the sake of which we have turned away from the springs of pure song?

**The Renaissance of Folk Music**

It is indeed fortunate that this tendency is not universal. From the middle of the nineteenth century, the great Russian composers began to make unstinting use of the folk song themes in which Russia is so rich. Without them, *Pskovitaine*, *Boris Godounow*, *Prince Igor*, *Petrouchka*, etc., would not have been what they are. This renaissance has now become general. Musical experts in France have for some years been discovering and publishing numbers of manuscripts dating from the 13th to the 16th century. Thanks to the expeditions to Rumania, Czecho-Slovakia, Greece and Egypt, and to the efforts made by the University of Paris during the Colonial Exhibition to obtain some records of African and Asiatic music, we find new vistas of discovery constantly unfolding before our eyes.

Germany, represented by Herr Hornsbostel, Curt Sachs, R. Lachmann, has devoted herself for some considerable time to a similar task. Hungary and Italy are concentrating their resources with the same objective, while England, over and above her researches into the folk-songs and traditional dances, has made most significant progress with her *Pipers’ Guilds*. She cannot be too highly congratulated on this achievement, for this delightful instrument, the pipe, which has been used from time immemorial by all sorts of people, can do more than any other to free the child from the inhibitions of conventional education and help him to express himself without restraint.

**Eastern Music for the West**

We often make use of the remarkable memory of very young children in order to teach them several languages at the same time, possibly without realizing that this mnemonic facility is dependent entirely on the accuracy of their ear. It must be borne in mind that this faculty grows in proportion to the use that is made of it. This is undoubtedly the reason why Oriental teachers will not allow their pupils to write down the essential features of their instruction, and so oblige them to rely on their memory instead. By writing down what ought to be memorized, the faculty of memorization itself tends to atrophy from lack of use and this is one of the gravest faults in our western system of purely written education.

Finally, the limits of our present auditory capacity are largely imposed upon us by our use of instruments with notes of definite pitch. We ignore or mis-hear the two or three intermediate tones which may occur between every half-tone of the chromatic scale, while any Moslem or Hindu toddler appreciates and sings them with perfect accuracy. Western children would certainly be capable of doing so too if we would give them the opportunity of listening frequently to carefully selected examples of those beautiful melodies which are still the heritage of the East and which are certainly capable of reviving and revitalizing the music of the future.

To sum up, the chief requirements in modern musical education seem to be these: to place within reach of every child a sort of anthology comprising examples of the greatest and most representative of musical achievements throughout the world, laying special stress on extra-European contributions because of their richness of form and rhythm.

To the experts in musical research, those musicians who must also be ethnographers, belongs the task of selecting from among the countless folk-song records of all countries (after carefully considering their authenticity) those which are most suited to children owing to their simple texture and the purity of their melodic line. This cataloguing might result in a collection of records which would enable the children to learn to sing songs without the help
THE child who comes for music lessons wanting to learn an instrument, is full of curiosity, willing to discover a new world, to experience new sensations, very often burning with desire for self-expression. If we succeed in taking advantage of this situation and stimulate these desires, we are sure to arouse the whole of his energy and interest. Most children have a definite idea of what music means to them and of what they want to get out of it. Their conception of music may not be ours, but their idea inspires them and compels them to make their effort. If we ignore it and make them follow ours instead, they feel themselves deceived; either they refuse altogether or they follow us unwillingly, growing lazy and uninterested. If they are ‘good,’ it means that they are already used to relying on grown-ups and have resigned their own initiative and forgotten what they came for. The ‘good’ ones learn what they are taught but they certainly do not have the interest of the discoverer, and no one who observes children can fail to notice the difference.

What do Children like in Music?

What is it that children like in music? Why do they want to express themselves through it? A fairly large number come for reasons that have nothing to do with music. They want to play because Mummy or Daddy does, or perhaps there is an elder sister or a friend whom they admire and want to be like. This is especially true of a certain type of neurotic child. In such cases, you find the queerest ideas of music: a girl, for instance, whom I had allowed for some time to choose her own material in order to find what means of expression would best suit her, said suddenly that this was not what she wanted; she wanted to have real lessons and scales and arpeggios as her sister did. Another who played nicely by ear but did not know her notes, used to put a book on her music stand as if she had seen her mother do. A third, a perfectly normal girl of eight, one day started a kind of rocking movement with her playing which did not go with the rhythm she played.

These pupils of course do not really want music for itself and their need might well be satisfied in some other way. Nevertheless, they may find what they seek in music, though it depends on other things whether they succeed or not. Usually this desire to imitate others does not play such an important part but it is difficult to eliminate it completely.

In order to understand the much larger group of those who really like music for its own sake, we must remember that the part which music plays nowadays in people’s lives is different from what it was formerly. There is not much silence left for people who live and work in towns, out of which a desire for music can arise. We are drowned in noise all day long and cannot help becoming dull or at least less sensitive to it. In consequence, music is consumed in strong doses, both in quantity and quality. Two things illustrate this: the exciting rhythms and harmonies of jazz which form a considerable part of to-day’s musical practice, and the wireless, which works more or less all day in a great number of houses. There is no quiet and solemn hour of music in which everybody joins, either playing or listening. Instead there is something impersonal constantly talking, singing, playing at you, while you are eating, working, or talking yourself, a thing which nobody notices much, whatever it is doing, and which you turn off the moment you feel inclined to do so.

Ready Made Music

What does this mean for children growing up in such surroundings? First of all, for them, music is something which is always there; it belongs to the room like the fireplace or the wallpaper. They miss it if it happens not to be on, but then it is got so easily; you just press a button or turn some knobs or put on a gramophone record. For many children, music just means playing with the wireless, turning it on or off, increasing or decreasing the tone, or finding other stations. They certainly feel they are active musicians when they handle a complicated instrument like the gramophone, where they can choose the record they want, repeat it as often as they like, alter the speed and so on. It gives them at least as much satisfaction as it does to grown-ups to play the pianola. At a stage where children enjoy this, I cannot see how they can be expected to undergo the fatigue of learning an instrument.

Secondly the musical medium to which they are
used is a very refined and complicated one. They may learn nursery rhymes and folk-songs at school, but the ‘grown-up’ music of their homes means more to them. The modern child has experienced the sounds of all instruments in every possible combination: it knows choir and orchestra, it has heard church music, symphonies, operas and jazz. The quality is the best, the quantity enormous, the emotional expression as strong as it could be, owing to the latest refinements of musical technique.

**Experimenting with Music**

Thanks to this kind of experience it is not likely that children who take up an instrument will agree to study simple, more or less ineffective little pieces of music to which they are bound for a comparatively long time. They want to do exactly what they like on this new instrument, to experiment with sounds, to find out where all these fascinating things come from. One of the first things pupils usually do when they come to me is to take the piano to pieces as far as possible, in order to see what is inside, to try how the pedals work, to count the keys, to find where their hands meet if they start at the same time at the two ends of the keyboard, what it sounds like to play on black keys only, to do a glissando and so on. Very soon the children realize that this does not bring them nearer to music, and so I have no need to prevent them from experimenting at first. And I think perhaps they are right to want to know what their instrument is like before using it for a definite purpose.

After this they are ready to concentrate on sound and make what they call music. What they are interested in varies very much. Some are fascinated by movement, and they may as well keep for some time to drums or other percussion instruments. For others the interest lies in the increase and decrease of tone, while a third group delights in finding out just how the sound they want, adding note to note until they get a whole tone, and a fourth group loves to mix sounds into chords.

Some don’t quite know what they want, and if they don’t settle down at once we offer them all these things making them try first one and then the other. Then they can choose. The sooner they get a result in the desired direction the keener they will be to go on. This means that if they are interested in the right notes, we must allow them plenty of time; if they want rhythm or speed, we cannot bother much about notes, while if they want to get a rich and full tone they must be allowed to use their fingers all at once in order to obtain the desired effect. Our first rule is not to offend the ears, and as long as this kind of improvising does not do so it is all right. Some children simply love it: others do not, but they will probably start their studies the other way round.

**Self-Expression and the Laws of Music**

It does not matter what they do first or how long it takes them to explore the first phenomenon, till they feel their lack of skill and experience and try to make up for it, and fill up gaps. In any case they will have to realize and experience three things at the beginning, whatever material they use: (a) music reacts on our ear only and cannot be made or judged by relying on anything else; (b) sounds and successions of sounds call forth definite expectations within ourselves, (c) fulfilling these expectations produces satisfaction.

All this sounds simple and commonplace. Yet one finds plenty of people who in playing use eye and intellect instead of ear, and don’t care at all whether they carry out in the second bar what they promised in the first. In most children, too, eyes and intellect are much better trained than ear: relying on the ear is new, like finding one’s way in the dark by using touch alone, and some may find it easier to use other expedients. But if at this stage we give children the crutch of musical knowledge and notation, it seems to me that we shall probably make them musical cripples from the start.

The second experience I have mentioned makes them realize that we have to subordinate ourselves to the laws of music; that, for instance, an improvised melody, if it is to be real music, cannot be ‘made up’ or composed from single elements, but it must grow from its beginning like a plant from its root, so that the musician is nothing but a mouthpiece for his music.

This need not be consciously known to the child: if he hums his tune as it occurs to him or spontaneously moves with a rhythm or brings a bit of music to the expected end, this will do for us. We can then start the proper study of the instrument, which will begin with the question: What have we got to do in order to make it produce the wanted sound? And now we try hard to find out the required notes, to bring them in at the right moment and in the desired way and tone. Continuous attempts and growing experience will develop the necessary aptitude as well as a knowledge of the laws of music and a desirable amount of instrumental technique. Here we have a second rule: be truthful to your own imagination and don’t accept anything instead of the truth, however nice it may seem. Even at this stage it is better not to teach pupils anything they have not found out for themselves. I always wonder at the poor use children make of the rich material they get in all kinds of musical and bodily training. They mostly offer a scheme they have been taught, while their imagination seems to have no outlet and to become poorer and poorer.

I much prefer it when pupils bring me compositions, violent efforts at saying something, in which I can feel how they have been wrestling with all kinds of difficulties. I know it will force them to go on. Or perhaps they bring a piece of music that has attracted them, because it is something they have felt themselves and can understand. If it is too advanced for their technique they realize what they lack, and put it aside until later when they have more skill. Such a method may not be the most efficient way of developing quickly a perfect technique, but it keeps the interest and the imagination alive and enables children to gain a new and exciting means of self-expression.
Rhythmic Movement in School

MARIA BIRD

The sum total of a child’s personality may be said to be his ‘rhythm’. The proper adjustment of his forces and the proper balance between his physical, emotional and intellectual powers determines whether that rhythm is good or not. Good movement is born of imagination, and emotional impulse. It should be entirely fit for its purpose and it must have direction, meaning, continuity and coordination. It is the direct result of the harmonious collaboration of the whole body and this gives it a special significance.

Bad movement is abrupt and jerky: it has no coordination and it is always meaningless and mechanical. Normal healthy children have a delightful, natural grace, so that if the teacher finds bad movement there is a reason for it somewhere. It may be purely physical: it may be the result of fear, self-consciousness, mechanical or stupid thinking, or even intellectual over-education. Two or three nervous children can affect a whole class, so that the ‘mass’ rhythm is broken and bad movement results. One of the first things a teacher must do is to give such exercises as she knows will free the bodies of the children and set their minds at ease. For, until children can move freely and without thinking of themselves, they cannot express any emotion or respond to any stimulus.

Rhythm and the Small Child

Exercises for small children from five to eight years of age should be based upon big unrestricted movements of the whole body. Space is most important. The room should be large—though not so large as to divorce the children at the far end from their teacher—and all movements, however free, should fulfil the law of rhythm in having preparation, climax and repose. Spinal movements and correct breathing are important. Relaxation, physical and mental, is also a necessary part of the work, since no child can be properly rhythmical unless it is able to relax its body. At this stage the value to the child lies in the unconscious development of his own inner rhythm. The outward appearance of this expression has no importance except as an indication of the inner experience. Little children are pretty and it is tempting when demonstrating with them to give them exercises which appeal to the eye. This cannot be too severely condemned. Unsuitable imposed movements such as mechanical repetition, stamping, etc., destroy rhythm and stultify any creative force the child may possess. But the sincere expression of a normal child’s own feeling in movements, which are in themselves rhythmic in that they have both purpose and meaning, unifies his whole being and helps to give him freedom and confidence.

In awakening the child’s instinct for rhythm it is necessary to start with his own tempo, to let him find movements at his own speed and to work from this without using the stimulus of music, except perhaps in the use of a drum. It is only when his inner feeling for rhythm is established, through simple things like running, jumping or skipping, that music should be introduced. Too much attention should not be given to the outward form of these early exercises, but the friendly atmosphere of equal opportunity should be established so that the children feel easy and happy in working at their own individual tempo. Physical beauty is of course an asset in a child, but no child should be singled out for solo work on this account alone. If the more lovely or more gifted children are exploited at the expense of the less lovely and less gifted, an inferiority complex will arise and many will sink into copying the others instead of making their own efforts. Imitating the better work of more gifted children is of no use whatever. Each child should develop his own imagination and reach his own limit, whether or not the result is graceful.

One of the most satisfactory aspects of this work is the way in which unexpected gifts and talents appear. Here is an example. John was a musical, sensitive boy of eight with very good natural movement. Although he could produce excellent ideas in group work, he was nervous and shy and quite unable to do an exercise alone or to take any initiative. One day he was taking part in an exercise which had been intended as an experience in leadership, for the leader chose his own step, running or skipping, and the others followed. He could carry out any design he liked in space, using curves and changes of direction and starting and finishing where he pleased. John happened to be second in the line when the leader for some reason fell out. Without preparation, John found himself leading with other people running at full speed behind him. He hesitated and looked frightened, but he was running so fast himself that he could not immediately stop. So he went on running, eventually bringing the line back to his teacher at the piano. His face was transfigured: he had become a leader.

‘May I lead again?’ he panted. And off he went, making a bold pattern, using the space well and bringing his followers back to a successful finish. He did this several times, making in all five or six designs before he was satisfied. The other children caught his excitement and greatly enjoyed his adventure. After this there was no more difficulty about his taking the lead and he no longer minded doing things alone before the rest of the class. Thus in overcoming his shyness he not only liberated himself, but was able to contribute something of value to the community.

Rhythm and Imagination

There are two kinds of imagination. The first is objective, and gives the child the ability to reproduce
or reconstruct images of things already known, seen or heard. Examples of this may be found in movements such as reaping, sowing, hammering, etc. The second kind of imagination is subjective, arising out of an individual response to a given stimulus. Instead of reproducing something already known, something new is created. For instance, a phrase of music may suggest a curve to a child which he reproduces with his arm or body, thus creating something which until that moment had no existence. This is the creative force of the artist. From the beginning children should be encouraged to improvise movements, melodies, rhythms and designs. They should be allowed to experiment with space, learning how to use it properly. Some children are very dramatic; others less so. The group as a whole produces the necessary ingredients for a successful lesson. One child may invent a rhythm, to be clapped with the hands or played on the piano, another may do some rhythmic movement such as hauling an imaginary rope, another may dramatize a story, and a fourth may compose a melody. Here we have both forms of imagination produced by the class itself.

**Rhythm and Music for Children of 8-12**

Music plays a great part in the creative work of children from eight to twelve years of age, for this is a period wherein the child's imagination develops very rapidly and he not only wants to express his ideas but to make others understand and share them. This means that the actual presentation gains in importance. It is not enough that he can feel what he means himself: he must present his idea so that his companions understand it and recognize his meaning. As he is still young enough to be unselfconscious, he is often most successful. He also takes a great interest in group movements and is able to conduct or help to work out a symphony in movement.

The following are three contemporary examples of the kind of work which can be done at this age. A group of children between nine and ten years of age produced a set of animal rhythms, basing their ideas on the natural movements of animals. They wanted no music and showed great powers of observation and amazing virtuosity in presenting different characteristics. One child displayed all the grace and dignity of a stork by executing balancing movements on one leg; another leapt like a kangaroo; while a third represented the light agility of a mouse by running at an incredible speed along the wall. Another group, aged up to twelve years, dramatized the story of the Christmas Rose—again without music—and with a very moving simplicity. A third group worked out the short movement of the Pastoral Symphony without any help from the teacher. When a group of children begin a work of this magnitude it is as well first to play the whole composition to them. They then find movements which, to them, 'realize' the significance of what they hear. This free response is almost certain to produce one or two good movements which form the basis upon which the group works.

**The Intellect Comes into Play**

At this age, there comes the study of form and structure and the beginning of purely intellectual
work. Care should be taken in cultivating the child’s intellect to avoid that over-development which destroys the finer quality of sensitiveness. Intellectually, the child learns to understand the laws of balance, repetition and contrast which form the general plan and structure of the composition under discussion. He also learns how to concentrate, to think clearly and without haste, to develop his memory and powers of observation and when necessary to do two things at once without confusion. These things are an important part of his Eurhythmic training, but they must not become so important that they supersede the child’s understanding of music. Giving advanced rhythms and polyrhythms for no other reason than that they are difficult is to be wholly deplored. But, on the other hand, many children take a delight in interpreting ‘hard’ rhythms or memory tests, regarding them as a game.

Rhythm and the Older Child of 12-15

From twelve to fifteen, great changes take place in the child’s nature. Boys rarely continue to study Eurhythms after ten or twelve. This is a pity, as they show great originality and present ideas in a very different manner from girls. Physical changes in the girl’s body often bring with them self-consciousness, a disinclination for effort as well as other symptoms easily recognized. The critical faculty develops rapidly, often unreasonably, but the girl’s interests are by this time well established and she begins to think in earnest of what she will do later in life. Many girls lose interest in Eurhythms at this age and when this happens they should be advised to discontinue the work for the time, and encouraged to devote their energies to some other subject. Only those who have some deeper interest and show considerable promise will want to continue. This loss of interest does not mean that the subject is by any means exhausted. It simply means that, for the time being, the girl has reached her own limit and that until she has grown a little more she can get nothing more from it.

For those who continue, however, during this critical period, attention should be directed outwards towards the music or toward anything that will take their minds away from themselves. Lessons should include vigorous movements, and not too much hard mental work and not too much relaxation. Creative work rarely appears at this age. From sixteen onwards, however, Eurhythms begin to have a new meaning for the girl, until with the dawning of maturity a fresh creative significance enters into her rhythmic expression.
THOSE who followed the trend of the New Education—which stands all over the world for the development of self-expression—felt years ago that Miss James's Pipes would grow to be one of the corner stones of musical activity both at home and at school. Like all good things, the pipe movement spreads quietly, slowly and persistently. Its great strength lies in the fact that the personal experience of each convert makes other proselytes: there is no need to try and talk people into it.

Owing to different causes in different countries—puritanism in England, romanticism in Germany, France and Scandinavia—music as an activity has disappeared from most people's lives. The development of the gramophone and radio has made them passive auditors. Singing, that most natural expression of music, claims only the smallest part of the weekly time-table in schools; while the drudgery of learning musical technique frequently crushes the enthusiastic joy of music-making at the outset. But the pipe movement is truly international, for it is based on the inherent instinct of the individuals of all nations to create their own things with their own hands and learn their technique by handling their own instruments. That is why the movement started by Miss James came like the solution of a dimly recognized but deeply felt problem.

The Pipes in France

The pipes have only recently come to France, through the enthusiasm and interest of Madame Gueritte, president of the Nouvelle Education, who felt when she first got into touch with the English Pipers that French children needed the pipes to counteract their over intellectual work. At the Conference of the Nouvelle Education in Paris in 1933, Mrs. Trudi Biederman-Weber presented a set of pipes and as a result, courses in pipe making were started, and the La Guilde des Joueurs et Faiseurs de Pipeaux was founded.

This Guilde is now just a year old, and its members are all grown ups, mostly teachers and parents. We arrange for courses and meet for music-making, give lectures and demonstrations, and had the great
pleasure of playing for modern French composers like Jaques Ibert and Florence Schmitt. Soon we hope to edit a book of melodies for French children. In France, the interest in musical treasures of the fifteenth and sixteenth centuries and earlier is still quite recent, and has not yet attained the importance of the similar movements in England and Germany. Hence the pipes have a mission to fulfill in helping French children to appreciate the old music of their own country. But it is important not to forget that children should also play music written for them by their contemporaries, and musicians and composers should remember that they themselves can help to prepare their own future audiences. A child taking to a melody by Gustav Holst will always be interested when he sees that name on a programme for he feels a sort of personal contact with the composer.

The Pipes and Chamber Music

Chamber music can develop quite naturally from pipe playing. Pipes and voices go very well together, and a quartet with one or two voices can sound charming. Lute and guitar are excellent instruments for accompaniment, and if one is lucky enough to have a clavecin, they make a most delightful mixture of sounds. But even primitive instruments, like tuned glasses and home-made drums, give the incentive for playing together and so help the players to gain self-confidence and real enjoyment of their own musical activity.

The Pipes in Schools

Up to now, the only centre in France where pipes are actually taken into school life are the MacJannet Schools in Paris and Saint-Cloud and the MacJannet Summer Camps on Lake Annecy. We hope that their example will spread in time to other schools. But piping ought to fit in—and is indeed badly needed—with the Scouting movement. It should be possible to have a piping test or better a musical test based on piping. Scouts might have to prepare for it for more than a few days or a week, but it would not only give them a hobby and a pleasure for life, but also the key to musical understanding. The French Scout organizations are thinking of allowing their leaders to be initiated into the pipe movement, and we are hoping for great developments during our second year of life.

The joy of playing one's own pipe

[b]y courtesy of Miss Margaret James
The Hertfordshire Rural Music School

ETHNE PRYOR

Do people prefer listening to music, or would they rather take part in it? I believe that most people would join in if they were given a chance. The Hertfordshire Rural Music School first offered village people that chance five years ago and now seven hundred of them have taken it.

Music is, of course, an excellent form of education. To learn an instrument, all the virtues, such as patience and self-control, are needed, and the Music School will accept anyone as a student who is willing to work hard.

You never know what you can do till you try. A mother of nine, a village woman, started to learn the 'cello two years ago. She now plays in an orchestra. Last year I saw her, pink with excitement, playing in a competition at a Musical Festival. I am sure, years ago, she never dreamed that such excitement and pleasure existed.

Bringing Music to the Villages

Miss Mary Ibberson, the Founder and Director of the School, discovered that Hertfordshire people wanted music, and she became convinced that the best way to give it to them was to send competent teachers into the villages. A centre from which the classes could be organized was necessary, and so she took a room in Hitchin, and founded the Hertfordshire Rural Music School five years ago. I will describe some of the circumstances that convinced her that she was right in starting this bold scheme—I call it bold because it was started with a handful of students and no capital.

For some years Miss Ibberson had been doing social and educational work for the Letchworth Adult Educational Settlement and one winter she came to the village in which I live to give a country dancing class. The members of it were farm hands, gardeners, domestic servants and factory workers. I was astonished at the progress they made. At the end of a year they had learnt to dance on their toes and had forgotten to be self-conscious. One summer they wanted to go on with the class out of doors. Of course we could not move the piano on to the lawn. Fortunately, a friend of mine played the violin, but it was hard work and she needed help. Miss Ibberson then discovered (she has a way of discovering these things) that I had once played the violin, although my instrument was in the attic where mice had nibbled a hole in it. I have to bring myself into the things) that I had once played the violin, although I am an example of an incompetent tutor, and other friends. The first hour was spent in giving lessons. 'Cello lessons took place in the old nursery because it had a low ceiling. It was there that a black beetle once came out of a 'cello in the middle of a lesson—'I'm sure it's nothing to do with me', said the pupil—but, although our house is very old, that was the only black beetle I have ever seen in it.

 Guests were sometimes startled to find a professor playing the clarinet, or some one practising the double bass in their bedrooms. My sons found violin stands in the bathroom and my husband ate his dinner to a strange accompaniment. At eight o'clock we all met in a small drawing-room to play together.

At first Miss Ibberson and Miss Grubb arranged simple tunes for the band to play, for it has always been difficult to find music that is simple without being dull. Miss Ibberson insisted from the start that beginners must be kept back until they had learned how to play in time, how to listen until they knew when they were out of tune, and how to feel rhythm.

After a while the band gave a concert to their relations and friends. Their entire repertoire took five minutes to perform, but every student, however nervous or incompetent, had to play a solo, and this made a concert of proper length. Later on we studied Haydn's Toy Symphony, and I remember that the nightingale, in her excitement, always swallowed the water in her little instrument, and so failed to trill at the right moment.

Miss Ibberson was encouraged by the progress made by this first village band, and something she overheard one evening, perhaps, made her finally decide to start the Music School. She was walking along the road behind two boys and found they were having a vigorous argument on the merits of Bach and Purcell. She saw clearly that as well as a general desire for music, there was real talent that ought to be given a chance to develop.

The Launching of the School

I wish to write rather of the personal than of the business side of the adventure, but, to put it briefly, the School was launched in 1929, by the Hertfordshire Rural Community Council, helped by the Thomas
Wall Trust and the Educational Settlements Association. At the end of the year Sir Walford Davies had consented to be president and there was an Advisory Board of musicians and people who represented social organizations in the County. A Governing Council was formed from which an Executive Committee was chosen. Eight subscribers gave from £25 to £30 each and many promised annual subscriptions of smaller sums. At the end of the first year there were 177 students, whilst to-day there are 700 from 32 villages, and the work has spread into Bedfordshire and Buckinghamshire. A new school, modelled on ours, has just been started in Hampshire and others in Wiltshire and East Sussex are being organized.

Each year our School has celebrated its foundation by giving a Concert in which every student is asked to take a part. There are speeches and an appeal is made for money. The music is practised in the villages and then all the classes meet to rehearse together in Hitchin a month before the Concert. This year the Concert was in London to enable some of the classes and organizers from other counties to be there.

Facing Financial Difficulties

Our pioneer Hertfordshire School is, without doubt, a musical success. In 1932 Dr. Adrian Boult conducted the Founders' Day Concert. He said he was astonished to find how well the students knew their music and how well they played in tune. Miss Editha Knocker told us that 'The beauty of tone and feeling with which the choir sang the Bach Chorale moved her deeply'.

Sir Walford Davies remarked at one of our Annual Meetings, 'An artistic success is never a financial success,' and we have followed the example of the hospitals who build first and ask for the money afterwards. The School is fundamentally a charity, for nearly all the classes are run at a loss.

A good teacher cannot undertake more than twelve students in a class. The normal fee paid by an adult student for one hour's lesson a week is from sixpence to a shilling, and children pay from sixpence to ninepence. Most of the tutors are professional musicians and must receive a fee. Many return part of it, and also work for the School in other ways in their spare time. Their transport is an expense, for they go to remote villages in all weathers. There is often a fee to be paid for the hall or school in which the class is given. The result is that there is a deficit of about £5 a year on each class, which has to be paid by the School.

There are many other expenses, such as the Director's and Secretary's salaries, office expenses and rent. The students pay for their instruments in small weekly instalments. The School buys instruments from various firms and at sales, and several have been lent or given.
THE WORK OF THE SCHOOL

There are many kinds of classes, orchestral classes for violins, violas and cellos, choral classes of all sorts, including a male voice choir. Students can have individual lessons on any instrument or for singing. The School has an orchestra of tutors and amateurs and there is an intermediate orchestra for the more advanced players from the villages. The Director conducts these two orchestras and several classes, and has most of the choral work in her charge. This is in addition to her control of the office and management of the whole School.

I have been told that some people view with apprehension the crowd of students that is rising up, playing moderately well on cheap instruments. What is to become of them?

An old lady once told me stories of her youth. She remembered how in her grandmother’s house the footman would remove the tablecloth after the meat course and they would all gather round the large fireplace with sweetmeats on little tables beside their chairs. Then they would sing part-songs and madrigals. She said, ‘Anyone who could not sing a part felt ashamed and uneducated’.

I have more faith in the future than in the past, but there are some good things that English people seem to have dropped and left behind. I allow that my old lady came of a musical family, and that she could afford good lessons, but it is just this need of good teaching that the Music School supplies. In time, a long time, perhaps, country people will meet together as a usual custom to make music, and those that cannot join in will feel ashamed.

Meanwhile there is another answer to the question, ‘What is to be done with these players and singers?’. It does not matter very much what they do. They are fundamentally changed already. Remember the mother of nine and her cello!

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THE PIPERS’ GUILD
IN ENGLAND
Holds an Annual SUMMER SCHOOL at OXFORD
THIS YEAR: from August 8th to 22nd under the direction of MARGARET JAMES

Application may be made for one or for both weeks. Each Student will have time to make, decorate and play a number of pipes and will be shown how the craft may be passed on to children or to adults as part of creative, musical and artistic education. Treble, alto, tenor and bass pipes will be used in parts.

Accommodation may be booked through the Guild.

Apply for particulars to:
Miss MARGARET JAMES,
21, St. Margaret’s Rd.,
Oxford.
Essential Values of the Family

SIDONIE MATSNER GRUENBERG

WHATSOEVER values we may give to the changes that are taking place in the home and family life to-day, the existence of such changes needs no discussion. Certain of them are obvious. Many of the traditional functions of the home have been profitably delegated to various external agencies: the school has taken over some, the factory others. Recreation is coming to be a community problem; and children—and adults too—are spending more and more of their free time outside the home in pursuit of various amusements, recreational activities, social interests and hobbies.

We realize that the traditional home, the picture of home that we have come to reverence, is not the home of to-day. Although it was in some ways superior to that of the present, nevertheless it is no longer suited to the needs of life. This situation may be bound up with the progressive removal from the home of its economic and educational functions; but that is only part of the story. The home has become emptied of significant content and dynamic influence, because with the transfer of these various functions has come a specialization in social groups and interests that not only disregard the home from which they derive impetus and sanctions, but are also often in direct conflict with it.

School and Home: Competition and Co-operation

An outstanding illustration of this is the school, which started out as an educational device supplementary to the educational functions of the home. It was designed to help people transmit special techniques, the three R's, and certain traditional values related to social living and social integration. The school could from the first, as it can now, perform certain educational operations more conveniently or more efficiently than the parents. Like all growing institutions, however, the school expanded. It has taken over more and more educational functions, and has invented and elaborated new ones. It has at last reached the stage where it carries on in its own right, where it competes with other social agencies, including the home, for an increasing share of the social income; where it establishes procedures and makes demands, often at the expense of the home.

For example, the home is responsible for getting the children to school betimes in the morning, or at whatever odd hour the complex programme of the system may set, but the school is not responsible for getting the children back on any schedule. The home is asked to send the children to school clean and presentable, but the school may dismiss the children as soiled and dishevelled as circumstances determine. The teacher is more expert than the parent in transmitting the three R's and many other arts and sciences; she may even give excellent lessons in citizenship; but her teaching seems to be entirely divorced from the making of better sons and daughters, or brothers and sisters, or fathers and mothers. Experience in these intimate and all-important relationships is still to be found only within the four walls of home.
The Unique Position of the Family

We think of home as the place where the young child is protected because of his complete helplessness. But it is more than that. It is a grouping of persons of various ages and distinct temperaments, all of whom are dependent upon each other. Of course the young child needs affection and security; needs, so to say, a life-line to which he can cling and along which he may venture out into new dangers without excessive risks; needs constant guidance that will serve him until he can move forth confidently and unafraid. The family serves the young child—is necessary to him—in ways that are obvious to us all.

What is not quite so obvious is that the parents themselves and the grown and growing children also have need for the family group, for affection, for security, for mutual stimulation, for aid and comfort. Whether we live in a period of stagnation or in one of violent social and economic change, whether in time of peace or in time of war, the young people must of necessity depend upon the older ones for guidance and interpretation. Even if eventually the family traditions and ideals are outgrown or discarded, the growing child must be helped by the home both to meet this variety of usages and practices among the adults of the present and the past, and to reconcile the discrepancies between ideals and standards, as taught and preached, and the actual behaviour of the adult world. Conflicting assumptions, doctrines, desires and practices make adjustment difficult in every human relation. It is the continuous, usually unconscious, daily experience in the home and as a member of the home that holds together like a warp the cross-weaving of outside events, of exhortation and sermonizing, of formal teaching and of deliberately sought information and guidance.

Parental Responsibility To-day

It is precisely because the various social and economic functions that formerly belonged in the home have been pushed into the outer world that there now stands out, bare and unmistakable, the essential function of parents in the lives of growing children. Merely providing, merely keeping a house in order, merely teaching arithmetic or automobile mechanics or cooking, merely doing any and all the things that the specialists can do as well, will not supply children with what in the end only parents can provide—the direction of the growth of personalities, the integration of divergent forces of the community so that the children come through whole.

Thus even in view of all the home has lost, we must reach the conclusion that the family is of enduring worth, not because of its antiquity or mysterious sacredness, but because it still does for people something they very much want done. It not only protects and nurtures the helpless infant, but all through the years it supplies its members, grown-ups as well as children, with security, with affection, with moral backing, with a sense of belonging. It is true that in our confusion of traditions and backgrounds there is no outstanding pattern of family life that appeals to everybody or serves everybody. But it is equally true that in every class, at every social level, the family strives for a mode of life that approaches as closely as reality ever can to the ideal picture of what the individual wants himself and his children to be, and of what he wants them to seem in the eyes of the community.

Our uncertainty is, of course, due in part to the swift pace at which the world as a whole is moving; but it is also in part, and more directly, due to the fact that the family, in losing so many of its traditional functions, has also lost much in both self-assurance and social power. If it is to regain these two important qualities, there must be a re-awakening in parents themselves. Their self-assurance must again be rooted in a respect for and understanding of the individual needs which the family serves. They must concern themselves increasingly with the processes that influence the emotions, that make for richer and deeper living, for the distinctively human values. Health and shelter, skills and manners, are all necessary for the welfare of the individual and of the group, but the methods by which they are attained must be re-examined in relation to what they do to people. With more and more of the mechanics of life delegated to specialists and experts, the responsibility of parents as such must turn more and more to functions and processes that cannot be delegated. The family will come through this crisis with a new kind of unity, based on its unique opportunity
the norms of morality and decent living accepted
the continuous outcome of these trends we see
the individual in his need both for personal
security and for integration as a member of a
compact and complex social group.

Standardization, Repression and Disintegration
Economic and social changes have in the past
set up strong trends which our present depres-
sion merely exaggerates into emergencies. As
the continuous outcome of these trends we see
not only standardization in material things, but
also a parallel repression of spontaneity and of
individuality, and a steady breaking down of
the norms of morality and decent living accepted
in any single community or social group.

Both the long view and the immediate crisis
bring into strong delineation those values of
social living which remain distinctive to the
family. Historically, it may be pointed out that
every revolution has disrupted individual fami-
lies, but that after every great revolution the
family has emerged changed, but not weakened.
The form of family life which we now see in
the throes of what amounts to a revolution had
its roots in a rural, agricultural society, which is
go. But there is no evidence to support the
fear that the family will not survive. We may
have attached our sentiment to the old oaken
bucket and the family hearth, whereas we
really mean adequate water supply and con-
venient heating arrangements. The family, as
has been indicated, rests on fundamental
organic and psychic arrangements. Its essential func-
tions include various techniques, but also many
subtle processes that cannot be systematized
and standardized. It operates chiefly through
manifestations of attitudes and sentiments.

But, faced with standardization, repression
and disintegration, it is no wonder that the
members of the family often feel themselves
helpless. And yet it is in its ability to meet these
inimical forces that the family, and with it our
civilization, must—and will—vindicate itself.
The need is for a parenthood that knows what it
wants for itself and for its children; for parents
and children do, after all, constitute the living
population. What is good for them cannot in the
long run be bad for others, and what is not good
for parents and children is not good enough
to tolerate.

NURSERY SCHOOL ASSOCIATION OF GREAT BRITAIN

Summer Conference
In her opening address at the summer Conference
of the Nursery School Association of Great Britain,
held at Swanwick from June 8th to 11th, Miss Lillian
de Lissa said that the conditions of nurture applied in
the nursery school to children between two and five
years of age were equally necessary for children up
to seven. There was room for experiment in the
various ways in which these conditions could be
provided, as, for example, through the nursery-
infant school for children from two to seven years of
age, or through the infant-nursery school for children
of the same age group.

The subject of the Conference was ‘The First
Seven Years of Life’, and the problems were dealt
with from many angles.

Dr. Grace Calver and Dr. Ethel Dukes who dealt
respectively with (a) the physical and psychological
development of the infant under two, and (b) the
changing needs of the child from two to seven, each
supplied in her own lucid and helpful way the
scientific background against which the problems of
the administrator and the nursery school teacher
stood out in bold relief.

Miss Freda Hawtrey developed her views on the
subject of infant and nursery schools, and said that
the conception of the child under five as a pre-school
child was a fatal one. Children over five suffered
from this false break, since the nurture they
needed was apt to be confined to those under five.

Miss A. MacKechnie of Bradford aroused con-
siderable interest by a delightful and informative
account of the Nursery-Infant School she has evolved
by a combination of an existing infant school and an
existing nursery school in that city of pioneers, an
experiment which, in spite of administrative diffi-
culties, bids fair to achieve success.

Dr. Margaret Hogarth described the transforma-
tion that had taken place in certain of the residential
schools that had been taken over from the extinct
Boards of Guardians, and in which the repressive
routine of institutional life was being replaced by the
freedom of nursery school methods.

Miss Rachel Talbot dealt with the training of
nursery nurses, with special emphasis on the psycho-
logical needs of the young children who would come
under their care, and this gave rise to an interesting
discussion on the ways in which the work of nursery
schools and of day nurseries might be brought into
closer relationship.

In a masterly survey of the issues raised in the
Conference, Miss Grace Owen, O.B.E., M.Ed.,
referred to the administrative difficulties in the way
of progress and said that these difficulties could only
be overcome by the establishment of a Department
of Child Development which would co-ordinate the
work of all departments and agencies dealing with
child life.
BOOK* has recently been published which is of great interest to all who are concerned with progressive education. It deals with a remarkable man and a remarkable achievement. At the age of 30, after a few years’ experience as a master at Fettes and Clifton, Cecil Reddie, without capital and with little influential backing, founded the first of the New Schools, Abbotsholme, which now has offshoots and imitators in many countries. In ten years from its foundation in 1889 it was already famous, attracting the interest of educationalists, and was already the parent of similar schools here and on the Continent. Then came difficulties, largely personal, arising from certain characteristics of the Founder. There were recoveries and renewed troubles, until finally, in 1926, Reddie retired. The School was handed over to a committee of Old Boys, and is now once more in a stable and flourishing condition. But through all these ups and downs his work was bearing fruit elsewhere. It was the starting-point of the ‘New School movement’ which has spread through Europe and America—it is said to number over seventy schools—and has affected education all the world over. Something of what the movement stands for, and the ideas of the man who began it, are set forth in this book.

Reddie was a man in whom all who came into close touch with him could not fail to feel that there was something of the quality we label genius. I had the good fortune to work with him in the early days at Abbotsholme, when he was at his freshest, radiating enthusiasm, and happy in the embodiment of his long planned educational ideals. There were troubles from the first, but he alone of those who combined to found the school knew just what he wanted and how it was to be attained; and with this knowledge he drove ahead through every obstacle, throwing aside any who could not fall in with his plans. He was always an autocrat, requiring absolute compliance. Those, masters or boys, who could give this, worked with him happily. For those who could not he had no use. Any attempt to work out similar ideas not in all respects on his lines and not under his direction he regarded not only as heresy but as a personal wrong to himself. It is noteworthy, however, that of two such heresies to which he was strongly opposed, one—the inclusion of a preparatory department in the School—has now been adopted at Abbotsholme, while even of the one he disliked most—co-education—he found some good to say (pp. 124-5) when he visited a German co-educational school that owed much to Abbotsholme, and saw it there for the first time in actual practice.

Much of the book is rightly given to an account of the basic ideas that Reddie worked out at Abbotsholme. It was a cardinal principle that the kind of education he desired could only be given in a school in the open country, where the boys could share in the work and management of the school estate, and come into continual contact with things and not merely with abstractions. In everything co-operation was to be substituted for competition. His aim being to equip those who would one day be leaders (for Reddie’s whole scheme of life was aristocratic rather than democratic) he saw to it that the school life should provide a progressive training in responsibility and in carrying out tasks for the good of the community, and that the older should train and help the younger. The chief characteristic of the school was its healthy and happy life. Great attention was paid to every detail of hygiene, as to which rules were carefully thought out—to such an extent, indeed, that to some there seemed to be an excess

* ‘Reddie of Abbotsholme’, by B. M. Ward (George Allen & Unwin, Ltd. 10s. 6d.).

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of regimentation. That was the outcome of a strain of almost Prussian thoroughness in Reddie, who neglected no detail in the 'patterned state' which he wished to make of Abbotsholme, a model not only to other schools but to the whole structure of society. Amongst the matters to which he attached vital importance two are singled out. The first is the need of giving frank sex-teaching to boys, together with the purifying of the emotional side of their life by the encouragement of affection, in which, as much as in any part of his work, he was a pioneer. The other is religion, which he sought to make a more living influence by means of a special liturgy enriched with art and music and a wide range of literature.

Readers of this biography will find much in his ideas and in the methods by which he put them in practice that they are not likely to accept; but like all who came into personal contact with him, they will feel that they are in touch with a vital personality from which they cannot fail to learn much. And all will rejoice that the school which he built up with such careful thought and so much expenditure of himself remains as the memorial he would desire, and will wish it uninterrupted prosperity.

THE FELLOWSHIP AT WORK

HEADQUARTERS

South African Conference

A small dinner was given on June 6th to wish God-speed to members going from England to the Conference. Dr. Boyd, Miss Johnson, Mr. Lismer, Mr. Lynch, Dr. Rugg and Miss Soper spoke, and Mr. Rawson was in the chair. Altogether 35 delegates left England in that week.

On June 4th, by the courtesy of Mr. Te Water, the High Commissioner, a number of the films going to the Conference were shown at South Africa House under the auspices of the British Film Institute, which has been responsible for the collection of the teaching films, and N.E.F. Headquarters which has collected films showing new work in schools.

Charlotte Bühler

The lectures given by Dr. Bühler for the Fellowship during May were a very great success. The attendance varied between 140 for the course on the Development of Personality and 40 or 50 for that on Teachers' Personal Problems. Copies of the questionnaire upon which the latter course was founded are available at Headquarters for all teachers who would care to fill it up and so contribute to the extended study that Dr. Bühler is making of this problem under the auspices of the Fellowship. An article by Dr. Bühler on the subject will be published in the next number of The New Era, which will also contain summaries of the two other courses given by her at Woburn House.

TORONTO, CANADA

The Toronto group continues its active work, having held nine meetings during the last nine months. In January, Dr. Michael West, who has been continuing his researches into the teaching of foreign languages, including English, lectured on the latest developments of his work, and during the next month a study group of High School language specialists was formed with him and is steadily proceeding with research in the field of language.

ENGLAND

South-Western Federation

The inaugural year of the South-Western Federation has been very successful. The Council of the Federation now includes representatives of Bristol, Southampton, Gloucester, Somerset, Dorset, Devon and Cornwall. Its president, Dr. John Murray, Principal of Exeter University College, is attending the South African Conference in the place of Lord Eustace Percy who unfortunately has been detained in England. Films of schools at work in Frome, Bristol, Gloucester and Southampton have been shown at different centres, including Southampton where more than 2,000 people attended on April 17th to see the films and hear an address from Mr. Freeman, the Director of Education, on the work of the N.E.F. These films together with many examples of good art work being done in the schools of the South-West have been sent to the South African Conference.

Social Education Group

A one-day conference was held on June 6th at the English-Speaking Union in London to discuss the question of direct education for citizenship in schools. Those present were K. C. Boswell, Frederic Evans, B. A. Fletcher, Dr. G. H. Green, Miss K. Gibberd, F. C. Happold, A. C. C. Hervey, F. J. Horrabin, Mrs. Hubback, A. V. Judges, Commander King-Hall, C. H. C. Osborne, Dr. and Mrs. Harold Rugg, Sir Ernest and Lady Simon, Miss M. Wise. Mr. Rawson was in the chair. The topics discussed were: (1) Should the social sciences (including history, geography, civics, current events, etc.) be taught as one subject, enabling boys and girls to grasp the essential features of the society in which they are living? Can they be made a central feature in the curriculum, and if so, what changes in the curriculum are necessary? (2) What kind of approach to contemporary problems should we seek to make habitual at school? Is discussion (not debate) one of the methods essential for this purpose? If so, what objections to it are likely to be raised outside the school and how are they to be met?

A 28-page memorandm was distributed to Conference members before the meeting, and as a result of the discussion a short agreed statement is being
drawn up. Anyone who would like to see the pre-Conference memorandum should apply to Headquarters.

**Hertfordshire Rural Music School**

The School celebrated its fifth Founders' Day at the Friends' House, London, on June 2nd. One member had put off her wedding so as to come and sing, while another had never been to London before and after seeing Euston Road she preferred Hertfordshire! The whole orchestra of 170 played the Anna Magdalena Suite of Bach, with easy parts arranged for beginners. Afterwards the whole Choir, which was almost as large, joined the orchestra in Bach’s Chorale ‘Jesu, Joy of Man’s Desiring’. Sir Walford Davies presided, and Miss Ibberson, the Director, spoke, explaining that giving concerts was not the object of the School, although doing so encouraged both students and teachers.

**FINLAND**

In March, Rektor Laurin Zilliacus entertained over 200 teachers at his school. They came to hear talks on new methods and to see the children’s work. The day was a great success and in its way unique, as among the visitors were representatives of Swedish and Finnish groups generally antagonistic to one another, as well as of the University and Elementary and Secondary school worlds. Rektor Zilliacus has also spoken on examinations in Sweden and at a meeting of the largest Finnish educational society, the President of which is the Minister of Education present, where he secured a resolution demanding the reform of examinations.

**UNITED PROVINCES, INDIA**

A U.P. group of the *New Education Fellowship* has recently been formed as the result of a meeting of all those interested in progressive education which was held at the Lucknow Christian College on March 1st last. Mr. A. H. Mackenzie, the Director of Public Instruction, United Provinces, presided, and Principal A. C. C. Hervey, Vice-President of the Punjab Section of the Fellowship, was the speaker. An exhibition of new education materials was also shown.

**LATVIA**

The Association of Secondary School Teachers of Latvia has now become a Service Member of the Fellowship.

**NORWAY**

Reports from the Norwegian section tell of great activity this year. Eleven meetings have been held in Oslo. In January a large gathering in the City County Hall listened to a prolonged discussion on the question of including sex education in the school programme. Later Dr. Elsa Köhler spoke on the educational situation in Germany and lectures were given on the Winnetka system. In April a very large audience assembled in the Old University Hall to listen to Professor Pinkievitch’s lecture on Education in Russia. The section has also initiated an inquiry into problem of Entrance Tests for Training Colleges. Any details of tests proposed or in use in other countries would be greatly welcomed.

**SOUTH AFRICA**

The Department of Education, Cape Province, South Africa, has become a service Member of the Fellowship.

Mrs. Ensor is building a coloured and native school in Lauterwater, Cape Province, and has also started a branch of the Women’s Agricultural Union there.

**NEW SCHOOLS**

Ecole Nouvelle, Bruxelles

Mlle Amelie Hamaïde, who for many years directed the Decroly School at Brussels, has now started a small co-educational kindergarten and primary school of her own at 11 Avenue Ernestine, Ixelles (Quartier de la Cambre). We are delighted to hear that though this is her first term she already has 75 children in the school, which will only take a hundred.

A new Odenwald

We have just received a letter from Paul Geheeb in the course of which he says: ‘Since its foundation in 1910 nearly 1,400 children passed through the Odenwald Schule, nearly a fifth of whom were foreigners. Many hundreds of children made their home there; for many it was their only home. . . . In March this year, the school was dissolved and most of us left the Odenwald. It seemed as though the school had perished: in reality it underwent a metamorphosis. Its ideal was always to become a school of humanity on the basis of the highest German culture—in the sense of Goethe, Schiller, Herder. This was not to be attained in the narrow national compass within the hills of the Odenwald. We have had to go to Switzerland, the land of liberty and snow-clad peaks. I believe that I am not at the end of my life work, but at the beginning. Only in these last years do I feel that I have understood in some measure what education means. By continuing my work, I mean to keep faith with my children and show my gratitude to the New Education Fellowship for all the sympathy and encouragement it has given me during many years. . . . We have found a new home at the Institut Monnier, Pont-Céard sur Versoix, Geneva, a New School with which I have been in friendly relations for many years. Several of my ablest and oldest collaborators and a few dozen children have followed me from Germany. We thus form a German working community in which English and American children can be introduced to German language and culture just as thoroughly as at Odenwald. Besides this, they have excellent opportunities for learning French which is the language of the country. Moreover we want to prove that one can
live simply and cheaply even in expensive Switzerland. We hope to welcome many visitors from among our friends in the New Education Fellowship.*

A New Salem

Herr Kurt Hahn, until recently head of Prince Max of Baden’s co-educational school at Schloss Salem in Germany, is now conducting an experimental Boys’ School in Scotland at Gordonstoun, near Elgin, Morayshire. The school is for boys of preparatory school age and upwards and will pursue the general aims of Schloss Salem. The large Council, which is responsible for the school, contains many names well known to ‘new school’ circles in England, including those of Bertram Hawker, G. Winthrop Young, Leila Rendel and Eva Hubback. It is to be noted that the old Schloss Salem still exists with its original headmistress.

Die Schule am Meer, Juist

We regret to announce the closing of the Schule am Meer, the ‘new school’ community conducted for many years by Herr Luserke on the island of Juist in the North Sea.

Bookshelf

An Atlas of Current Affairs. J. F. Horrabin. (Victor Gollancz. 3s. 6d.)

This is a brilliant book by one of the most brilliant modern map-makers. Its seventy-four maps, each of which has a short page of explanation, sketch the modern map-makers. Its seventy-four maps, each of which has a short page of explanation, sketch the presentation and have had the unusual distinction of being praised with equal warmth by the Morning Post and the Daily Worker. The bare simplicity of both maps and letterpress reveals the hand of the experienced journalist and makes the whole an indispensable instrument for all teachers and pupils in post-primary schools and adult classes who are concerned with current events and post-war history.

Tracing History Backwards. Stephen King-Hall and K. C. Boswell. (Evans Bros., Ltd.)

This little book consists of material used by the authors in the broadcast talks to schools entitled Tracing History Backwards. The intimate form of the wireless talk may appear a little strange to sophisticated readers, but we must nevertheless congratulate the publishers on their enterprise in giving us this book, for it contains within its hundred pages the best short introductory account of modern civilization for the boy or girl of thirteen that we have read in English. Many adults, too, will be grateful to Commander King-Hall for his ability to pick out and summarize clearly what is essential and peculiar to our present world order. Mr. Boswell’s attempts to reproduce the past are not quite so successful, partly, perhaps, because he has chosen to use a dramatic form which seems to embarrass him somewhat.

But the book as a whole with its illustrations and follow up questions succeeds admirably in the object it sets before them of ‘linking up School History with present day problems’.

Education in Ancient India. A. S. Altekar. (The Indian Bookshop, Benares City. Rs.)

It is impossible here to do more than draw attention to such an interesting and important book. It is one of the most valuable pieces of work on India as yet undertaken, giving as it does the story of the different aspects of education in India from the earliest times to about 1200 A.D. It is an exposition of the national spirit, society and religion being so closely interwoven in the education of the child; and it is interesting to note that after years of evolution the ideal of education has not fundamentally changed. The formation of character and the building up of personality have been the goal of education in India for countless years.

Education was many-sided in the past, as it is today. Dr. Altekar tells us that the average youth in Ancient India was expected to be well acquainted with several of the many sippas (arts), offshoots of education such as archery, medicine-magic, agriculture, music, and painting, in addition to his ordinary liberal education. A most striking feature seems to have been a combination of liberal and professional education: the educational system of that period laid particular stress upon civic and social duties and responsibilities, and originality was encouraged. The result was remarkable creative activity in all spheres as early as 800 A.D., and scholars came from Eastern and Western Asia to learn from India.

A review of these past achievements may help to elucidate problems with which we are faced to-day in our modern system of education. The delightful chapter on the methods of teaching provides food for thought; since literary debates as a means of testing the proficiency of scholars, personal contact between teacher and student, and the heuristic method of teaching, all emphasized in that period of Indian history, are commended by educationists to-day no less warmly. This brilliant study, the outcome of impartial and untiring research into the past for the benefit of the future, should be read not only by students of the History of Education, but by those who teach them.

I. D. Bonifacius

*55
Mr. Blewitt has performed a valuable service in bringing together these accounts of twenty-one modern schools, a service not only to parents who may wish to consider such schools for their children, but also to students of educational aims and methods. The book has, moreover, considerable importance as a sociological document, since it gives an account of a body of important institutions, as well as of the educational atmosphere specially characteristic of our time.

The twenty-one schools, each described by its Head, range from Summerhill on the extreme left, through Beacon Hill and Dartington, Bedales and Leighton Park, to Badminton, Croham Hurst and Halstead, lying not very far from the middle line of variation. They have certain general attitudes in common. There is, for example, considerable unity of outlook upon two major matters: the attitude of the school to the child, and its attitude to the modern world. All set a value upon the child’s freedom in some form or other, and in a considerably greater degree than is found in traditional schools. All have great faith in the child’s natural impulses as the chief instrument of education. Only one or two go so far as to assume that the child is all right and the parent and society almost all wrong, but all share the feeling that what the child himself brings to the school is the most significant element in his education. Again, all agree in rejecting the claim of examinations to be either the end or the measure of education at any age. They recognize that whilst examinations may often be the only key to the doors of the future for the child, they are nevertheless merely incidental to the true business of education.

All these schools, moreover, have an international outlook upon the modern world, although this varies in explicitness and emphasis. Many believe that the school should have its eyes fixed not merely on the current problems of social life, but on the future. The school should look beyond the present in order to prepare for it. This view of the sociological function of the school is most clearly defined in Mr. Curry’s essay, but it is inherent in many of the others. Perhaps the essential quality shared by all these educationists is their feeling that the school should not shut its doors to the outside world, but should be in constant contact with the ordinary realities of social and economic life. All would make the school less monastic, less artificial, more widely based and social. These schools provide amply for the arts and crafts and for practical pursuits of every order. Not all of them put an equal value upon scientific experience. Almost all take a deliberate attitude towards the problems of sex education, feeling that to help the child in this is a matter for which the school cannot escape responsibility. Some of them emphasize the value of sex information, mainly through courses in biology.

One of the most interesting differences between these schools is in their attitude to self-government. Only one or two of them are doctrinaire in their pursuit of this method, and even Mr. Neill claims the right to put a spoke in the wheel of the children’s affairs when he judges this necessary. A number of schools do, however, follow the method of self-government very seriously. Others limit its application to given fields, and one or two definitely hold that children of school age are not able to bear the burdens it imposes. But these again differ in the mode of control which they exert over the children. In some it is highly individual and personal, in others more deliberate and communal. They differ, too, in the value which they set upon organized communal life in the years of childhood.

These deliberate statements of the aims and methods of each school by its Head are obviously not able to give us a true measure of what they actually achieve for their children. Since schools are human institutions they can only be judged in function. We know from our own experience that the actual working out will always differ from our account of what we mean and wish it to be. Difficulties and failures will occur every day. Changes in detail of method will happen most frequently just in those schools which are in the closest touch with the actual needs of the children and of the changing world. Nevertheless, these essays do give parents essential data for the first approach to an understanding of modern schools. For the educationist, they provide a splendid challenge, compelling every student to revise his own educational philosophy. The book will doubtless serve like a stone cast into a pond to move still waters in many a school that would not call itself modern.

Susan Isaacs

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Primarily written for the use of American students, there is much in this study guide which would be useful to students in England. The guide is divided into five parts. The first, entitled ‘Introducing the Study of Reconstruction,’ is concerned with the present crisis in America. Part II deals with the growth of our present economic system, Part III with attempts at, and proposals for, reconstruction, Part IV with reconstruction in an interdependent world, Part V with the formation of public opinion, education and the position of the individual in a new society. Each part is divided up into a number of sections for convenience of study. The book may be useful to students in England. The guide is divided up in a number of sections for convenience of study. The book may be described as a running commentary on modern problems worded in such a way that the student is continually called upon to think them out for himself. To enable him to do so numerous book lists are given. Many of the books are, however, American, and would be difficult to get in England, and those published in this country are given their American and not their English publishers. Even in its present form, the book would be very useful to both English teachers and students of contemporary affairs. A similar guide prepared particularly for English people would be invaluable. As far as I am aware, none exists.

F. C. H.


The Schools at Work. Pictorial Survey. (Published for the N.U.T. by Evans Bros. 64 pp. 25. Foreword by Viscount Halifax, President of the Board of Education. Short articles by Sir Henry Richards, H. A. L. Fisher, Dr. Cyril Norwood, Lord Eustace Percy, and Sir Frederick Menzies.)

It has been usual, since 1918, for Education Authorities to prepare in advance their plans for educational development. These often made interesting reading, but, alas! owing to national exigencies were often not carried out. In these volumes, however, we have clear and full accounts for two areas, the City of Nottingham and the County of Kent, not of what it was intended to do, but of what has actually been accomplished in the last ten and five years respectively; while The Schools at Work shows pictorially, and generally, the steady advance which has been made over the whole educational field.

In the Nottingham and Kent records, the main reference is to Reorganization which, in the former, is said to be practically completed, while in the latter, though gratification is expressed with the progress made in the urban areas of the county, there is a note of regret that the rural areas remain almost entirely unorganized. In both cases, however, it is a matter of interest that the Senior or Central schools are non-selective, and that examinations find no place in them. On the other hand, the Kent report expresses the view that secondary schools are undoubtedly hampered, at the present moment, by an examination system which presses heavily in places. With the pressure of examinations, the report continues, one of the problems is to see that there is retained some measure of that leisure, and opportunity for reflection which are characteristic of the good school and essential to all true education. If the new Senior or Central school can grow up without this incubus of examinations they will be able to breathe more freely.

Both areas have given special attention to buildings. The Nottingham report rightly stresses the fact that reorganization means a great deal more than the transfer of boys and girls at 11 years of age to Senior or Central schools. It involves great changes in buildings and equipment, and particularly in the provision of large rooms for practical work of various kinds. But even here there may lurk dangers, notably of the mechanization and standardization of curricula and methods. The Kent report urges that where great over-pressure on accommodation does not exist, experiments should be tried in giving children more freedom to pursue lines of individual work of direct and immediate value to them. There can, it adds, be a routine of the practical room and of practical work which is as uneducative and depressing as the worst forms of rote learning in the classroom.

These reports should be read and carefully studied. Not only are they full of information, but they inspire confidence in their authors. Nothing could better express their outlook than the passage from the Kent report which, referring to the criticism that the modernizing and beautifying of school buildings is a pampering of children and teachers, remarks that the lasting things in education have their origins in many imponderable things including the subtle influences and apparently unnoticed incidents in the daily life of the school.

What some of these influences really are in some areas can be seen in The Schools at Work, a fine collection of pictures which, beautifully reproduced, range from the activities of nursery and infants’ schools to those of the technical institutes. They represent, of course, our educational system at its best, and though the conditions of fifty years ago are contrasted with the present conditions in some areas, there is no picture of the present over-crowded classrooms, nor of the thousand-odd condemned schools. Still we may be thankful to be reminded of such advances as these pictures undoubtedly disclose and grateful to the N.U.T. and to Messrs. Evans for introducing them to us in such an attractive way.

It may not be out of place here to refer to the forthcoming series of brochures on the facts and problems of education which the Fellowship is about to publish. They will be sponsored by a committee on which Sir Percy Nunn, Lady Simon, Miss Hawtrey, Mr. Salter Davies, Professor Tawney, and Dr.
Ballard have consented to serve, and will discuss many of the questions raised by the interesting reports of Nottingham and Kent.

A. J. L.

How the Mind Works. Professor Burt and Others. (Allen & Unwin, 7s. 6d.)

The B.B.C., sensitive to the public interest in psychology, invited a number of eminent psychologists to deliver a series of broadcast addresses in simple non-technical language which would give the listener a general outline of the subject in its more popular aspects. These lectures have now been published in book form, and may be warmly recommended to those whose interest in psychology is keen but whose enthusiasm is too often damped by the psychological jargon of the text books.

Professor Burt says in his introduction: ‘Our prime intention has been to show by simple instance and in plain terms how the interest in the human mind has grown into a serious scientific study, and how the conclusions reached have a close and practical bearing on the problems of everyday life’. So important and far-reaching are these conclusions that it cannot be doubted that the future welfare of the world is to a great extent dependent upon the degree of success achieved by individuals and nations in overcoming mutual distrust and fear.

Much of the most interesting and important work in psychology has been devoted recently to the study of the child. Readers of The New Era, therefore, will find the lectures of Dr. Miller and Dr. Moodie of particular interest and help to them. The debt owed by education to psychology is immense: it is not too much to say that our whole conception of child behaviour, training and teaching has been revolutionized by the findings of psychological investigators in this field. It is now up to parents and school-teachers to practise in the nursery and the classroom the recommendations of child psychologists. This requires little book knowledge, provided the child is treated intelligently and with real, not affected, sympathy.

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Our Contributors

PROFESSOR FRED CLARKE has been since 1930 Professor of Education at McGill University, Montreal. For seventeen years before that he was Professor of Education at the University of Cape Town. He served on many committees on education while in South Africa and represented South Africa at the International Labour Conference of the League of Nations at Geneva. He is well known as a lecturer, and is the author of Essays in the Politics of Education and The Teaching of History.

ERNESTO CODIGNOLA, Professor of Education at the University of Florence, author of many books on educational problems, has edited and translated many of the classics.

SIDONIE M. GRUENBERG is Director of the Child Study Association of America and author of a number of books, including Our Children, in collaboration with Dorothy Canfield Fisher.

PROFESSOR HAROLD RUGG has been since 1920 Professor of Education, Teachers' College, Columbia University. He started his career as a civil engineer. In 1915 he switched over to education and later became a teacher in the great Lincoln Experimental School attached to Teachers' College. He wrote with Miss Ann Shumaker The Child Centered School, and his most recent works are Culture and Education in America and The Great Technology.

PROF. GRAF VON DÜRCKHEIM-MONTMARTIN, of the University of Kiel, is one of the younger generation of German educationists specially invited to attend the Conference in South Africa.

GENERAL THE RIGHT HONOURABLE J. C. SMUTS, P.C., LL.D., Minister of Justice for the Union of South Africa, statesman, philosopher, scientist, internationalist, author of Disarmee Peace, Holism and Evolutions and Africa.

L. VAN DER STRAETEN has done fifteen years of experimental work in pioneer schools and training colleges, and is now on the staff of St. George's School, Harpenden, Herts.

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Outlook Tower

The South African Conference, held in Cape Town and Johannesburg in July, gave the New Education Fellowship a fresh opportunity of declaring and scrutinizing its beliefs. The atmosphere was particularly stimulating because the majority of the delegates, while listening with interest and sympathy to the recommendations of experts, were sifting and criticizing all they heard, asking themselves how far this procedure could be directly applied to their own schools, how far this theory met and solved their own problems, how far the world-wide experience of educators from many nations confirmed their own experience in South Africa.

Six thousand people, three thousand of whom were full delegates, attended the Conference, which was supported by the Government and by over one hundred associations. The main theme, Educational Adaptations in a Changing World, was discussed at the evening lectures, while morning courses, allied with it, were held on New Methods and the Technique of Teaching*. In addition, there was an excellent exhibition of arts and crafts from other countries and from the native and European schools in South Africa. Dr. E. G. Malherbe, Director, at National Bureau of Education and Social Research, who supervised the arrangements for the Conference, may well feel proud of the excellence of the organization he devised.

The Conference came at a psychological moment for South Africans; for they are now ready to challenge older forms of education and eager to evolve a truly national system, adapted to the particular needs of their country. They have come to realize that though there are fundamental principles upon which the education of all countries must be based, it is essential that in each, the educational system should grow out of the needs, the culture and the traditions of the people. As the section on education in the Carnegie Report of the Poor Whites Commission pointed out, it is of vital importance that education in South Africa should be brought more closely into touch with the social problems of the nation.

These problems were discussed in a spirit of eager and critical enquiry by delegates who gave a particularly warm and sympathetic welcome to the speakers from overseas—each of whom was an acknowledged expert in his or her subject. The personal contact with the leaders of the educational world stirred their enthusiasm: the lectures confirmed them in their challenge to current educational practice; the discussion widened their outlook and gave them encouragement by showing them that the difficulties ahead exist in some form or other in all countries. For their part, the visitors were keenly interested in all that they saw of life and education in South Africa and particularly in the progressive development of many South African Schools. As Mr. Hofmeyr, Minister of Education, said in opening the Cape Town session, visitors were able to see some world problems standing out clearly against the relative simplicity of South African life. And, as a result, they will be helped to understand the same problems when they meet them again in the more complicated conditions of their own countries. The exchange of views between delegates and visitors was undoubtedly of the utmost value to both, and the Conference not only stimulated interest in educational problems throughout South Africa, but it also indicated some of the steps which might be taken to solve

* The material collected at the Conference will shortly be published in a book prepared and edited by Dr. E. G. Malherbe. It can be ordered from the New Education Fellowship, 29 Tavistock Square, London, W.C.
them. In fact, it may well have far-reaching results, not only in theory, but in practice.

Throughout the Conference, speaker after speaker stressed the importance of the overwhelming changes in economics, in international relationships, in social life, which are sweeping over the world to-day. We live indeed in a maze of contradictions.

This Changing World
We have sufficient food for everyone, yet millions starve: there is work for all, yet millions are unemployed: the ordinary man and woman cries out for peace, yet the nations arm. In his lectures at the Conference and in the article which appears in this issue, Dr. Rugg states our economic problems. ‘We have’, he says, ‘an economy of abundance . . . we have passed into the day of potential plenty. For the first time in history man can produce a civilization of abundance for all.’ But we have not yet evolved a method by which we can distribute supplies of food and labour so that each individual can have the essentials of life and perform congenial work. This can only be done through international co-operation, by the state control of essential commodities, by the abolition of wasteful competition. There is nothing wrong with the world itself; it is we who are to blame, our relationships with one another which are at fault. But if we are to overcome our difficulties we must have faith in ourselves and in our fellows. In his recent book Lord Allen of Hurtwood says: ‘I am profoundly convinced that the key to modern politics is psychological. Material development has momentarily out-run our willingness to adapt our mind to the complete change which has swept over the world. . . . It is no longer some intricate economic diagnosis that we have to make but a quite elementary adjustment of outlook’.

The Fellowship has long recognized this—its object is to make of education an instrument by which this change of outlook can be effected. We have set ourselves the task of building up a new attitude of mind, of making co-operation and consent the basis of behaviour instead of self-will and force. But we cannot change the thinking of centuries in a few years; that is why we look to education, to the teachers of to-day who are now forming the outlook of the citizens of to-morrow. And never has it been more essential for us to think clearly—to define our goal, to be sure of our philosophy, to be honest and self-critical. For almost every nation is passing through a severe economic blizzard, and this in turn precipitates a political crisis. ‘Democracy’, says Lord Allen, ‘stands imperilled.’ Professor Clarke, who writes in this issue on The New Countries in Education, declared at the Conference that whereas the nineteenth century gave Democracy its chance, the twentieth presents it with its difficulties. We are slowly beginning to realize that the solution of these difficulties involves not only intelligence but character. In his lecture at the Conference Dr. Dewey besought us to remember the need for a definite philosophy. He himself has defined Democracy as a scheme of freedom in which everyone may develop his latent capacity to the highest possible degree. But to-day, economic storms and the consequent pressure of present want and future uncertainty have impelled men and women in many countries to hand over their destinies to a single man or to a group of men. Faith in Democracy and all it stands for is weakening; on all sides one hears much light talk of the failure of the League of Nations and the folly of the international ideals for which it stands. Yet the need for co-operation among individuals and among nations remains: it is no dream but a vital necessity. The progress of science has made the whole world one unit: its component parts may turn to-day to autocracy for leadership. But even the autocratic leaders cannot isolate themselves; they must seek to co-operate with one another if they would solve their difficulties and remain in power.

We of the New Education Fellowship who believe in Democracy and unanimously declare that our goal is a free society, must not only remain staunch to our ideals; we must work actively for them. But we must remember that no permanent good can be achieved by force. We believe that any State which compels individuals to give up their freedom, even for the good of the State, is building on sand. We believe that if the major nations of the League Assembly try to force nations to behave in a particular way for the purpose of procuring
stability, such stability will not last. No machinery such as the League can work by itself: it depends upon the individual citizens of each nation to ensoul it. But even though our aims and principles must necessarily lead us to condemn many of the happenings in nationalistic nations, we should not be intolerant: we must seek to understand the underlying causes of events. For evolution is a slow process, and before we attain a free society we shall witness many attempts at reconstruction. From each we can learn something. For instance, there are many interesting and valuable ideas in Graf von Düreheim's article on education in Germany which appears in this issue, and also in the vivid description of the ideals underlying Fascist Education by Professor Codignola.

All the vital factors of a free society are, we believe, foreshadowed by the new education. And the basis of the new mental attitude which alone can make this free society possible is willing co-operation. This can only be formed when we have tried to discover and understand the causes of misbehaviour, whether in nations or individuals. Thus the new psychology, which is in practice a new type of human relationship, is the basis of the new education. But the pattern of our human relationships is laid in early childhood. It is the education we receive at the hands of our parents and our teachers that hinders or helps our intellectual and emotional maturity. Hence the urgent need for more parent education and for better cooperation between parents and teachers. In an after-lunch speech, the Prime Minister of the Union, General Hertzog, stressed the fact that character training should be the main aim of education and should take precedence over mere book learning. It is impossible to over estimate the influence of the home and the mother in the formation of character or to deplore too greatly the present divorce between home and school. But, as Dr. Dewey reminds us, children learn by doing. Our psychology and our philosophy must be essentially practical, for it is of the utmost importance that the home and school environment should make our children face situations in which they can develop the qualities we desire to awaken in them.

But here a vital question is raised: has the adult any right to indoctrinate the child with any specific theory of social reconstruction? Reconstruction is our immediate task in this age which Dr. Rugg has called the 'Great Transition'. Every teacher and every parent must consider the problems with which we are faced and study the trend of current events. There is a dire need for clear thinking, for a definite philosophy of life, for charity and tolerance. And while we make the child the focal point in education, it is obvious that we must not neglect adult education. Until we have more men and women in the homes and schools of the world who have accepted this new attitude to life, we cannot hope to influence a sufficient number of children to ensure that the next generation will be better fitted for their responsibilities than we have been. No one is too unimportant, for it is not what we say that matters, but what we
are in ourselves, each one of us, as parent, teacher or social worker.

In spite of the dark clouds that continually gather on our horizon, in spite of the pessimism that crushes so many of us, we can see everywhere signs that we are slowly and painfully moving nearer to our goal. Russia may join the League of Nations, America has joined the International Labour Bureau, and she is beginning to realize that her presence at Geneva is essential if world peace is to be maintained. But perhaps the most hopeful sign of all is the new interest which the average citizen is beginning to take in current affairs.

It is as though the troubles through which each nation has passed in recent years have awakened its individual citizens. Every electorate is beginning to discuss the cause and effects of the crisis, to consider the political and social future of the country. All over the world, men and women are stressing, in articles and books and speeches, the need for a new and better attitude to life and the importance of international co-operation. Politicians will indeed have to take a new view of the electorate for whose support they appeal until at last they come to realize that, as Lord Allen writes: ‘modern problems are no longer insoluble . . . it is a mistake to suppose that our difficulties arise from the state of public opinion, . . . the real need is for a completely new mental adjustment by the political leader—something equivalent to an act of faith.’

There has never been a more urgent need for the work of the New Education Fellowship. We must think clearly and work unceasingly to avert the catastrophe with which western civilization is threatened, and lead us at last to stability and peace. Each one of us must realize that something more than mere intellectual allegiance is required of us. No teacher can teach without consciously or unconsciously influencing his pupils, and in planning this particular number of The New Era, we have tried to select from the lectures and speeches given at the South African Conference those articles which most clearly set forth the vital problems of our age and the philosophy of life and education with which the Fellowship has identified itself. Some teachers may be tempted, on glancing through the contents page, to exclaim: ‘There is nothing in this number for me. My subject is not touched upon’. But we believe that at this critical stage in our national and international life, it is more important to give to our readers a graphic picture of economic and international relationships, a vivid and stimulating account of our basic philosophy, than to concentrate on a discussion of classroom methods. A new technique of teaching will not create a new attitude of mind unless the teacher himself has found his philosophy and brought his personal life into harmony with it.

With all the encouragement and enthusiasm aroused by the South African Conference to help us, we must go actively forward. It is not enough for our members and our World Fellows to declare their sympathy: they must be untiring propagandists. We believe that there are men and women everywhere who would be ready to join us if they did but understand. World Fellows should be leaders in their communities, in forming groups for the study of world affairs, in securing the interest and support of their fellow citizens. But, above all, we should each one of us be on our guard to see that our allegiance to the ideals of the Fellowship is not mere lip service; it should colour our daily life. We must watch our own reactions to current events, we must learn to appreciate differences, we should be careful that our attitude is constructive and not destructive. Our philosophy should be that of holism; we must continually strive to see the unity beneath diversity. Our concept of the place of nationalism in relation to internationalism must never become petty or intolerant. If we are educators, we should ensure that youth knows more of the great cultures of different countries than of wars and narrow patriotism. We must remember that in culture, science and art, there are no national barriers. Here at last we may find unity; in the things of the spirit all men are brothers.
The task of the New Education Conference is to consider the adaptation of education to a changing world. We are living at a time of maximum change. In fact I doubt whether there has ever been in any era in history, such a volume of change as we have to face everywhere in the world to-day.

Some of the changes are the aftermath of the War, but many of them are due to causes and factors existent in embryonic form before the War. I want to refer to two of these changes.

Changing over to Democracy

The first is this: We are switching over from one system of society to another; we are shifting from a middle-class society to a pure democracy, from a bourgeois world to a proletarian world. The culture to which we were accustomed, and which for hundreds of years has guided the development of civilization, was dominated by middle-class ideas and middle-class points of view. But we are passing to a society which is proletarian in character.

The second change is the change due to the progress of science. Science and technology are changing the face of the earth, and in so doing they are inevitably creating problems of enormous magnitude for our civilization. These must be faced and overcome, not only by the scientist, the industrialist and the politician, but also by those who are engaged in educating the rising generation.

Both these changes have tended to create a mass mentality, a standardization of the human mind. They both tend to suppress human individuality.

There is, for instance, no ideal more wedded to human progress than freedom—personal liberty and political liberty. But it seems that freedom is not very dear to the proletariat. On the contrary, dictators seem very dear to them, if we are to judge by the number constantly springing up.

Mental Standardization

While democracy and science tend to produce a standardized human being, the old influences which have protected human character and human individuality in the past seem to be weakening. For instance, the influence of the home and of organized religion have both lessened, and
as a result the whole burden of character training and of developing the child’s personality has fallen on the schools. It is an immense burden.

In its rapid forward stride, science has created a gap between existing moral and social ideas and its own conclusions. This gap must be bridged if danger is to be averted; and the best place to build the bridge is at school.

In the schools it is possible to teach the rising generations in various ways how best to assimilate the great advances that science has made. The old props of our civilization, the old taboos that formed the basis of our ideas, are disappearing. Some reinforcement, some buttress which will take the place of these old props must be found if we are to prevent a cataclysm.

The love of truth for truth’s sake, the love of objectivity, the importance of fact, the avoidance of mere passion in feeling and in judgment—these are the things that must be preserved. One of the best services which educators can perform in the service of humanity is to inculcate these ideas in the young mind so that the young shall have these forces to rely upon in the troubles that lie ahead.

Safeguarding Personality

Education can be of immense service to mankind by doing more than merely imparting information and knowledge, for education is concerned with life itself. It is the imparting of personality and character. Above all else it is essential that our children shall be vitalized, should be rendered sensitive to truth and to judgment and to beauty. If this is done, then human individuality and personality will continue to survive in spite of the depressing influences which threaten it to-day.

Imagination or Memory

If we see that children are given the fullest chance for self-expression, remember that knowledge is an inferior article compared with the value of the human soul, and learn from Nature that teaching should not bring tears or boredom but pleasure, perhaps education may come nearer to fulfilling this function. Above all we ought to develop creative imagination rather than memory. The child must learn, but it is a mistake to expect him to memorize a vast body of facts. He should be taught the fundamental principles, he should be shown how to acquire the knowledge stored away in reference books, and above all he should be taught to exercise his imagination and his judgment and to rely on them.

If I were a dictator I would lay down the following programme of principles for education:—

(1) The building up of individual personality.
(2) The enlargement of the imagination—not the memory.
(3) The filling of the young mind with interest, ideals, and joy of life and the avoidance of all repressions.
(4) The inculcation of truth and disinterestedness.
(5) The thorough grounding in fundamental facts, leaving the details to text books and books of reference.
(6) The principle of holism—that in this earth and in this universe we are all one of another and that selfishness is the denial of life.
DR. J. J. VAN DER LEEUW

We deeply regret to announce the death of Dr. J. J. van der Leeuw, LL.D., Director of the New Education Fellowship Association of New Schools, who was killed on August 23rd while flying over the Njomi District, South Africa.

BARELY three months ago, on the eve of the South African Conference, I stood on the landing ground at the Cape Town Aerodrome, waiting for Dr. van der Leeuw to arrive. He was making a solo flight from Holland to attend the New Education Fellowship Conference. Soon the vivid green Leopard Moth swooped overhead and glided down in a perfect landing. Dr. van der Leeuw stepped out as calmly as if he had just motored a few miles.

During the next fortnight, Dr. van der Leeuw worked untiringly and proved himself one of the most popular speakers at the Conference. He gave a notable public lecture at Cape Town on The Soul of Man in a Machine Age, and a fortnight later he opened the Johannesburg Conference, with General Smuts and myself, at a large and enthusiastic gathering in the City Hall. During the two Conferences, he gave many lectures on psychology, philosophy, new methods in education, disarmament and internationalism. His lectures attracted particular attention, for he was an original speaker, fluent, forceful and inspiring.

Yet, in spite of the many calls on his time and energy, he was able to enjoy the dances and amusements arranged in connection with the Conference, and his power of appreciating simple pleasure, his keenness and his sympathy made him many friends. His was a many-sided personality: he was not only a brilliant scholar, but a fine athlete; he excelled in such sports as climbing, skii-ing, riding, tennis and swimming.

Dr. van der Leeuw took his degree at Leyden University, and afterwards he devoted himself to the study of education and of the problems arising out of the world crisis. He travelled and lectured in many countries, including India, Java, Australia, New Zealand, the United States and Europe, while his books, The Conquest of Illusion and The Task of Education in a World Crisis, are remarkable for their penetrating analysis of present-day problems. During the last few years Dr. van der Leeuw identified himself wholeheartedly with the work of The New Education Fellowship, and in 1932 he was appointed Director of the newly formed English Association of New Schools.

At the close of the Conference, the lecturers from overseas and myself sailed from Africa, secure in the satisfactory knowledge that the Conference had been an unparalleled success. Dr. van der Leeuw remained; he intended to return as he had come, alone, by air. On arrival in England, we heard that Dr. van der Leeuw was missing; on September 3rd we learned the disastrous news of the fatal accident which had occurred while he was flying, in heavy mist, in the mountainous Njomi District. He was buried at Bulwonga Mission.

With his death, the New Education Fellowship loses one of its finest and most valued supporters. I lose a splendid colleague and an old and deeply valued friend.

Beatrice Ensor.
Education and the Great Transition
HAROLD RUGG

We who came to maturity at the turn of the Twentieth Century should recognize that we are caught to-day in a period that can properly be described as a Great Transition between two cultural epochs. I do not mean merely the few years since the economic crash of 1929-1930. On the contrary, I mean the forty years of drastic social change since the startling events of the 1890's. It was in these past forty years that the First Industrial Revolution catapulted into the Second; that the wasteful Machine Age passed quickly over into the efficient Power Age. In these four decades every aspect of that civilization that we call 'modern' changed with dramatic suddenness—the production of goods and the productivity of the workers, the ownership and control of physical things, the impact of races and nationalities upon one another, the concentration of population in towns and cities—to name only a few conspicuous phases. And it was these forty years that produced the devastating social problems which we all confront to-day.

The First Industrial Revolution
The break-down of the economic institutions in all industrializing countries in the past few years has rudely awakened us to the truly interim nature of our generation.

All workers who are concerned with social and educational reconstruction must now recognize the initial character of the industrial stage out of which we are now passing. The two centuries and more of engine and machine invention, of construction of power plants and factories, transport and communication systems and in general of large scale business enterprises, have produced for the first time in all history a highly productive economic system. Note the unique respects in which it was the first of its kind: for example:

1. The first invention of efficient power-driven machines.
2. The first central electric stations transmitting power over long distances.
3. The first vertical corporations with their giant concentrations of capital, their mechanism of automatic, integrated and interchangeable fabrication, standardization of parts and processes and specialization of labour.
4. The first unhampered applications of the concept of laissez-faire in economic life. Given efficient prime movers and machines, men, for the first time, were really free to exploit—to exploit people as well as things.
5. The first attempt to organize the collective economic affairs of nations on a world-wide interdependent basis. As a result six hundred million people are now dependent on the uninterrupted operation of a fragile world mechanism of specialized production and exchange, with fluctuating units of money, wages and prices, and an intercontinental market based on widely varying national standards of living.
6. The first experimentation with the concepts of political democracy—notably those of government by the consent of the governed, freedom of movement, freedom of assembly, and freedom of speech, trial by jury, and the like.
7. The first experimentation with the concept of education for all children.

We need not multiply cases. Our list documents sufficiently the initial character of the period of exploitation at the close of which we now stand. In these and in other ways the stream of events of the past two centuries constituted the dawn of a new culture. It was a First Day.

As a First Day it advanced by utterly unique economic and social trends. Not only was a new physical civilization suddenly produced; deeper lying psychological problems emerged as well. These are the devastating social and personal problems with which we are confronted to-day. But to understand them and to devise solutions for them we must know the characteristics of the social trends and the human traits which propelled them. Succinctly, what are the special traits of this first industrial and social revolution of modern times?
Acceleration

First, it was a period of spectacularly rapid growth. Every phase grew at positively accelerating rates, the production of goods, the aggregation of populations and their concentration in urban communities, the radius of the market, horizons of communication and exchange, the interconnections of cultures, the time-beat and rhythm of urban life. All was positive acceleration.

The basic idea motivating the century of expansion was MORE! More people to buy more shoes, more houses, more food: more power stations, more factories, more cars: more goods to export to 'backward' populations. No concept is more completely descriptive of this era of expansion than this one of positive acceleration.

The second characteristic of life in this era of expansion was its absorption in physical construction. Naturally, the first stage of industrialization was an orgy of building. The economic system, and with it the school system were quickly erected. Dynamic catchwords energized the struggle both with geography and with native owners. Conquer and settle . . . Build . . . Construct . . . Make it big, make it stunning.

Moreover, these concepts of construction were given a patriotic nationalization. 'America'—and all other new countries—must be built. There is not much time, so hurry. The good of the individual will be guaranteed by augmenting the wealth and power of the group. Hence build, for the sake of the country.

Thirdly, it was an age of undesigned and uncontrolled exploitation. The virgin continent, the cyclonic climate, the drives of human nature and the pressure of hordes of immigrant newcomers, all contributed to a restless haste to get immediate profits. This was true in South Africa, in Australia, in America, in all the 'new' countries. So everything in this earth was mined—the top soil, the forests, the gold and the diamonds, the coal and the oil, the iron, the copper and other metals. Everything in and on the earth was taken in a mad, unrestricted and unplanned race for gain.

It was an uproarious period of hectic trial and error—mostly error—and waste! The concepts of private ownership and free competition made design in the first era of industrialization utterly impossible. Although, even at the beginning of the debauch, thinking men counselled the imperative need for plan and social control, most of the energetic, shrewd and ambitious men threw themselves into the race for money and power, and rationalized their conduct by the French economic philosophers' doctrine of laissez-faire. The western man translated the physiocrats' dictum to suit his personal desires—'Freedom to exploit' . . . 'Every man for himself—and the devil take the hindmost.' And he did; that is, he took the rank and file of the people of the industrial countries.

Fourthly, the nervous tension of life rapidly increased. Changes in the tempo of living in the rapidly industrializing countries paralleled those of the new mechanical occupations, transport, and communication. Faster and faster beat the basic rhythms of physical life. 'Cutting down elapsed time' became an obsession of the man-in-the-street as well as of the pony express riders and the drivers of locomotives, automobiles or aeroplanes.

Neither thoughtful design nor contemplation was easy in such an intellectual climate. Mental life consisted of a succession of fairly obvious problems, each to be solved by impulsive generalization.

Because of many careful analyses of social change, we know now with some precision the approximate time at which one epoch definitely took the shape which marked its merging into another. The most pronounced point of change was the short period of the World War, 1914–1918. In these years population curves reveal points of inflexion, production curves rise more sharply, man-hour measures of production change more swiftly. Premonitions of the coming economic and social changes had, of course, been heralded a quarter century before in such new inventions as the automobile, wireless communication, the motion picture mechanism, the electric generator and the central power station; in the sharp changes in immigration, in America the filling in of the last frontier; in the marked drift from farm and rural village to manufacturing town and city; and in the swift alteration of family, neighbourhood and community life and of long-established loyalties.

From our vantage-point of perspective to-day we can see that even if the First World War had
been put off for another generation, the advance of social trend would have guaranteed that western industrial peoples would have been awakened by the 1940’s to find themselves in a new epoch. But the war was precipitated in 1914, and did speed up invention and technological advance enormously before 1919. Moreover it altered every aspect of industrial culture, piling up national and international debts, upsetting the relations between interdependent peoples, and dislocating markets, currencies, popular faiths, and political experiments.

Meanwhile, in the research institutes of the great corporations, invention was subjected to the methods of mass-production, and technological efficiency advanced by great strides. Every phase of the economic system was speeded up—the energy-converting power of engines, the integration of power, machines and processes in automatic factory production, the productiveness of human labour, and hence the permanent displacement of workers. Even during the prosperous 1920’s there were never fewer than 2,000,000 unemployed workers in America. Competition for jobs became fiercer and standards of living turned downward once more. Increasingly the bargaining power of the owner and the employer was enhanced, but the worker lost control over his job, his wage, his standard of living and his craftsmanship.

Crisis

Then came the well-known events of October, 1929, the crash of the financial house of cards and the shock to the economic mind of the nation. One result is of far-reaching importance; namely, the dazed awakening of a thoughtful minority from the fantasies of the previous decades, and the vigorous launching of new scientific studies of industrial culture. The signs of the depression had scarcely revealed themselves before a brigade of students of the economic-social system began producing new analyses of it. In 1929–1931 a whole library of criticism and protest prepared the way for many careful studies and ‘plans’ for a controlled economic system. The latter came from the pens of publicists, economists, historians, Chambers of Commerce, captains of industry, labour leaders, bishops of the churches, presidents and faculties of colleges.

A new body of creative students also entered the sociological laboratory. Engineers, ousted from their professional work, and free of the academic blinkers of classical thought, graphed economic history and fitted equations to the curves of the trend. World renowned scientists applied their concepts of energy and life and their scientific methods to the study of the economic system. Thus the current years have launched what promises to become the most creative period in the history of modern thought and social organization.

This Age of Transition

As a consequence, it has been made clear to us that we to-day are caught between two stages of economic and social change. These stages are, at bottom, very different. A few contrasting characteristics will illustrate the difference and set the chief cultural problem which our generation must solve.

First: Whereas the first epoch was one of expansion, of positively accelerating growth, the second is to be one of consolidation. We must now take thought; we must design an economic and social system which will work.

Second: The orgy of sheer physical building is over. The major part of the economic system is erected. We have passed out of the wasteful Machine Age, of crude steam engines, slipping belts, and creaking pulleys and gears, into the Power Age of efficient giant generators, long distance power transmission, and automatic, continuous, straight-line process factory production. The implications of this for thinking men are clear; they cannot deal with the problems of the new day with the ideas and attitudes of the old one. For example, we no longer live in a régime of scarcity; we have already passed into the day of potential plenty. For the first time in the world’s history man can now produce a civilization of abundance for all. And our language and thought must from now on show that we know it. And our educational design must show that we know it.

Third: The initial exploitation for immediate private profit and personal aggrandizement of the first epoch must give way in the second to designed and controlled production for the total group. Our new era of plenty is only a potential, not an actual, one. To bring it into
existence will require the building of a distribution system which is co-ordinate in effectiveness with the production system which has already been erected. But to do that in a democratic society, many minds must be made aware of the necessity for profound changes in the ownership and operation of basic utilities and industries.

That is, new problems of social control now confront us, and to deal with them we must build a new language of thought and discussion. For example: in a régime of initial exploitation of virgin continents, the concepts of laissez-faire, of success via competition, were useful, perhaps indispensable. But our régime to-day is very different: it is one, first, in which an efficient production system has already been erected; second, in which there is no longer any relation between what a worker can produce and the share of the social income which society can pay him as purchasing power; third, in which it is increasingly evident that profits and fixed charges take an undue proportion of the social income; fourth, in which personal competition interrupts the operation of the system and withholds much of it from use. In such a régime, I say, the concepts of scarcity, laissez-faire, private ownership and control of basic industries and utilities constitute the vocabulary of a foreign and useless language.

Fourth: As a final illustration, we must note that intellectually and spiritually the second industrial age is also new. We have moved from an epoch which demanded action and precept above all things, into one in which design and realization are possible. Indeed, two crucial problems of design confront us in these transition years. There is, first, the problem of designing a social structure that will produce the economy of abundance which is guaranteed by our resources and our technology. There is, second, the problem of designing a creative and appreciative personal way of life within that structure. The hub of the former is social control; that of the latter is self-cultivation. The guide to the former is the technologist and experimentalist; the guide to the latter is the artist and religionist. The truly great culture, on the verge of which we now stand, cannot be ushered in if either problem is ignored.

Education and the Problems of Design

To sketch briefly these sharp contrasts between the two epochs is to set the chief creative task of our transition years. That is the psychological problem of clarification. The passing of an epoch inevitably produces chaos and bewilderment. So it is with our current years; they are essentially years of drift, of lack of direction, of confusion. Hence the dire need is for clarification—clarification of trends and factors, of problems and ends; clarification of alternative courses of action, of probable consequences, of loyalties and allegiances.

But for the clarification of meaning, a new language is needed. The problems of the coming years, in America at least, simply cannot be thought about by means of the ideas and methods of thinking which dominated the mind of the first stage of industrialism. New ideas and principles must be found to fit the new situations. A new orientation, born of the current trends, is demanded. We are now confronted with problems of articulation in a period in which the language of our childhood must be discarded and a new one devised. That must be the major creative task of our Great Transition.

But the solution of our problems of social and personal design can be achieved only by means of a drastic revolutionary educational procedure. Western peoples, at least a considerable minority of them, must learn how to combine
efficient technological operation with democratic control; how to establish government by the consent of the governed through education in tolerant and critical understanding; how to develop interest and ability in creative labour; in short, how to apply the scientific method to the problems of men living together.

But, I repeat, to consummate these things under a democratic form of society, and any other form is totally repugnant to most of us, our recourse must be to education. Standing at the end of the first industrial epoch and at the beginning of the second, our problems, both social and personal, are educational ones. New minds are to be created. New personalities are to be brought forth. A new orientation to life is to be developed. A new language of thinking and discussion must be evolved. But these are all products of education. They can be brought forth only by many of the people taking thought about their society and their personal lives.

Creating ‘Schools of Living’

No doubt one would ask too much of the first century of public education to demand that it achieve more than the physical structure and an education of words. That much, at least, was done, not only in America but also in Britain, France, Japan—in all the industrializing nations. Ninety-odd per cent of the children of educational age were herded into school and classified into regiments and companies. School buildings were erected to house them. Teachers were brought together into ‘Normal schools’ and taught what ‘the book’ said. Courses of study of intellectual subject matter and sets of textbooks were prepared and graded to fit the year groupings of the young people.

Thus, in a century of hustling physical construction, a graded school system, national in scope, and fitted to the chronological development of childhood and youth, emerged in every new country. Within it education was conceived to be (1) something that went on in a ‘school,’ five hours a day, 180 days a year, apart from the home and community life which created it; (2) something one did before entering life, a preparation for life; (3) something one did with books, with words, not with the body, the spirit, all the sensibilities, the entire organism. Thus, even to-day, around the modern world, the dominant school is a book learning school, a school of literacy. This school has already produced a top-heavy white-collar class and a vicious new stratification of the social classes. But the basic problem of education to-day is to create schools of ‘living,’ the crux of which shall be creative labour, instead of schools of ‘literacy’ which have been the essential product of the first hundred years of educational building.

If the danger signals rising from a world-wide, top-heavy, white-collar class and a growing automatization of mechanical industry are to give us pause, then we must do something about it in education. We must not only devote our creative energies to devising a new economic-social system. We must think our way through the staggering problem of the incorporation of the creative act in education. At the present time, ninety-odd per cent of all the so-called modern schools of the world make almost no provision for creative expression.

And that brings us to the creative artist and his rôle in the personal and social reconstruction which is direly needed in this transition period. Whereas the scientific student of society supplies us with the concepts and methods with which to build a sound economic-social system, the artist supplies us with an indispensable key to the devising either of social or personal living. The concepts and methods of both the technologist and the artist are necessary. No matter how efficient its technology or humane its government, no culture will be truly great if it does not instil a high order of appreciative awareness in its people. And the problem of designing a personal way of life appropriate to the on-coming Second Day of industrialism not only parallels in importance and difficulty that of designing the new social structure itself; it is in addition a different problem. Men must live with themselves as well as with their fellows, and this presents the unique problem of appreciative awareness and self-cultivation. The danger is that men of creative potential, absorbed in the insistent social problems of the day, will ignore the equally imperative task of self-cultivation.

The Creative Artist and the New Education

Happily for students of education to-day, the
creative artist has not only broken through the bonds which hampered this expression during the first Industrial Revolution. He has, in addition, already begun to make himself felt in the new education.

In the past twenty years we have witnessed in the new schools of America, for example, the astonishing phenomenon of administrators bringing creative artists into the school in place of pedagogues of art. They have come into the school equipped with two unique abilities. First, they are masters of their arts; second, they are artist-teachers, sensitive to what youth can do in expression and appreciation with these art media. Hence they have not only revolutionized the creative atmosphere of the school; they have as well shown the way to developing the educational mode of self-cultivation.

Let us consider the potentialities of our present economic situation and the role of education in the Great Transition. It is clear that a civilization of abundance, tolerance, and beauty can be ushered in:

If Man, having built an efficient production system, designs and operates a controlled and equitable system of distribution.
If Man combines technological operation with democratic control.
If Man establishes government by consent of the governed through education in tolerant and critical understanding.
If Man, having reduced the twelve-hour day to the six-hour or four-hour day, develops also the capacity for creative labour and the wise use of leisure.
In a word—If Man applies the scientific method to Man-Man relationships as well as to Man-Thing relationships and lives creatively as Artist as well as Technologist.

We stand at the cross-roads to a new epoch: in various directions lie diverse Pathways to To-morrow. Some lead to social chaos and the possible destruction of interdependent ways of living.

One leads to the Great Technology and the surest guide along that route is—a New Education.
The New Countries in Education

F. CLARKE

Little more than a century has gone by since Canning made the famous boast, 'I have called a new world into existence to redress the balance of the old'. The occasion was England's recognition of the independence of the revolted Spanish colonies in South and Central America. There is a strong savour of eighteenth century politics in the language which Canning uses, and even to-day most of us have not advanced far beyond the habit of thinking of new-comers on the international scene only in terms of their probable effect upon the world balance of power. The manner of thought called 'power politics' is with us as much as ever.

But there is something more too. Democracy and improved means of communication, and above all the rapid growth to wealth and nationhood of the so-called new countries, are beginning to teach us to think of the relations between old and new in more fruitful terms than those of the mechanics of power. Haltingly and rather blindly mankind has embarked upon the painful process of grasping the moral and intellectual implications of a settled and peaceful world-order. In that coming order, the politics of power will not cease as some of our less realistic prophets seem to suppose. What will cease will be not power politics but the violent and lawless anarchy in which they now find expression. Power will still be sought and used, but under the restraints and checks of a clear and widely held conception of the larger good which has evolved its organs of action and commands its own instruments of power. Law presupposes community and community presupposes a necessary minimum of common ideas—a culture in short.

Exploring the Foundations of a World Order

Perhaps it is because we dimly realize this that a new interest has arisen in the study of the intellectual and cultural relations between peoples. Such a study is an aspect—the dynamic aspect—of comparative politics; it is the examination of those influences which determine the collective mind and spirit of communities. Thus it has a very definite contribution to bring to the great intellectual need of the modern world, namely, a much more precise and articulate consciousness of the differences between peoples, of the inevitableness and legitimacy of such differences and of the common ground upon which the world-steering institutions of the future can be built.

For that is our dominating objective: we are exploring nothing less than the intellectual and, therefore, the educational foundations of a whole world order.

It is my purpose in this paper to attempt to point out a few possible lines of study in a part of the field of comparative education that has not yet been thoroughly explored. Let me put it in the form of a question: To that common stratum of educational faith which in the future must underlie all differences, what will be the specific contribution of the new countries?

Transplanting a Culture

I propose to confine myself to those new countries which were settled by people from Great Britain. What does this adjective 'new' or 'young' imply, and what justification is there for the use of it? It is a mistake, I think, to look for the factors that produce the essential newness in conditions of geography. Differences of climate and soil and products do force adjustments of habit but such adjustments are made, not in the interest of a new way of life, but to form a defensive crust in which the old way of life may continue. In great Canadian cities with the sub-zero severities of a six months' winter, in the heats of Central Africa, in the reversed seasons of the Southern hemisphere, the same type of life is lived. There could be no better illustration of the fact that not geography, but the established historic culture of Western man determines his way of life than the persistence of the holiday seasons, such as Christmas. Nor does contact with other peoples, and the social and cultural adjustments thence arising, have a greater influence, for such influences operate strongly in old countries; and in some new ones—Australia and
New Zealand for example, they operate very little. My own experience of living for over twenty years in new lands after having lived for the first thirty in the old, leaves me in no doubt that the ‘newness’ of a country lies in the fact of transplantation itself. I do not think that sufficient attention has been given to the inevitable consequences of shifting a culture from the land of its historic roots and associations. We should get a truer measure of our educational problem in the new lands if we studied it in the light of the effects of such transplantation.

Life in Johannesburg or St. Louis or Winnipeg or Melbourne may seem a life uncommonly like that of London or Paris. But it is not the same, for transplantation provides an opportunity, which is taken sooner or later, for revision and reconstruction of the old cultural stock, much as moving house provides the occasion for getting rid of lumber and buying new furniture. The average citizen of an old land of use and wont is not conscious of the immense labour of the ages which has gone to equip him with the surrounding means of life. But transference to a new land shakes it all up as it were.

At first the migrating people does not realize what has happened. So you get Gothic architecture, frock-coats, five o’clock tea, Christmas dinners, the spelling book and the Catechism and all the rest. And the more precarious life becomes, the more tenaciously will the old things be clung to, even when they are obviously ill-adapted to the new conditions and a clear hindrance to real effective living.

Only very slowly does the ineluctable truth emerge, and it is generally the so-called ‘lower classes’ who force its emergence and first show a realization that genuine new things are possible
and that the institutions of the old country can be revised and freely reconstructed to the advantage of the common man. What may be called the class-struggle in the new lands, the conflict between a group of possessors who sought to reproduce England and a mass of dispossessed who sought to use freely the opportunities which the new situation gave, has received all too little attention. For the substantial victory of the mass has been decisive in our field of education.

The factor of difference between old and new, so little realized for so long, is mainly this, that the transplanting altered profoundly the relation of culture to history. The significant fact for us is the form of the relation of the migrant people to their older heritage. In an old country like England history works upon the minds and lives of the people less through the books than through the surroundings. For the institutions that determine life have largely grown up in the land where they now function. The village church speaks with the voice of the centuries, the life of the countryside wears still much of the fashion of the ancient past.

Reconstructing an Old Culture

It is this which is surrendered when the transplantation takes place. The forest and the veld and the prairie of the new lands speak with no such voice as this. But the pioneer peoples want and demand such a voice. The dialogue of life between the inner spirit and the answering outer environment, they feel, must go on, lest they wither and fade for sheer lack of adequate self-knowledge and that self-recognition which it is madness or death to lose. So they set themselves, pathetically enough at first, to the task of re-creation. But what all these things lack is just that eloquent time-signature which they had in the old lands. They are not the same and cannot possibly be the same. So the migrant people discovers, slowly and painfully enough, that the transplantation was even more decisive than they had thought.

As Time drives onward, builder and healer both, the countries erstwhile new, gather history also and the harmony between the culture and the land is restored. But this is a task of centuries. Meanwhile the peoples of the new lands are fixed in an inescapable dilemma: to retain their cultural inheritance fully they must continue to live to some extent a dependent and derivative life; while to throw off dependence and what is loosely called tradition is to risk spiritual starvation.

In education the conflict is ceaseless, noticed most prominently perhaps in Canada and South Africa, but lively enough in the United States also. Protestations of cultural self-sufficiency and of ‘casting off out-worn traditions’ have, therefore, inevitably something of the inferiority complex about them. They represent the clash of one worthy desire against another.

A Two-Dimensional Thinking

A further influence in producing that group of characteristics which we believe we find in new countries is the manner in which the replanting was effected. What strikes one so forcibly about the manner of settlement is a quality that may be termed simultaneity. The settlers who came were civilized people brought up in, and needing, a highly complex social and cultural order which demanded much sheer apparatus. Children appeared, and could not be allowed to grow up in pure wildness. Hence the pioneers were working against time. They had to provide the minimum essentials without delay, and achievements of necessities and amenities, which in the old lands had taken centuries and had come in serial order, had now to be produced on a single plan and all at once. Thus the third dimension, that of depth, tended to drop out of history and out of the popular consciousness, and instead we get a two-dimensional way of thinking which is still strongly exemplified in the new countries. When conditions were favourable, as they were in the United States, this original historic necessity produced the confident, optimistic, experimental spirit; the conviction that all things could be made new; that life could be planned as a whole if only our thinking about it were orderly, scientific and comprehensive.

Characteristics of New Societies

Let me now sum up the outstanding characteristics of the societies in the new countries, selecting only those which bear upon our question of education.

In the first place there is that optimistic
forward-looking confidence in power to re-shape. With it there goes, paradoxically enough, a curious streak of fundamentalism and conservatism, particularly in the field of moral and religious beliefs and customs, which has still great influence in education. For instance, I often feel grave doubts whether the schools generally in the new countries are as free and adaptable intellectually and spiritually as they are in history-ridden England. What is the cause of this rigid adherence to safe orthodoxies which impoverishes so many school curricula and paralyses so much fine teaching energy? To some extent, I think, fear. A real intellectual timidity in the world of ideas accompanies an almost reckless spirit of enterprise in the world of invention and material business.

Then in relation to the old countries there is a critical and suspicious attitude accompanied by great eagerness to clutch at the comfort of any sign of superiority on the side of the new, however unreal it may prove to be. That there are undisputed superiorities in the new lands will be established as time goes on. But the real service of the new, both to themselves and to the world, demands of them a calm and un-agitated and thoroughly deflated assessment of the true extent of their superiority.

A third quality, that of 'plan-mindedness', is a good deal modified by attachment to historic habit, as amongst French-Canadians and Afri-kanders. But it is still potent, bringing with it a disposition to underestimate the hard resistance of history and circumstance, to exaggerate the rationality of men, to misinterpret Equality and to act uncritically upon false analogies of the human with the mechanical. Most of our errors and superficialities in education arise from this source, chief of them, perhaps, a vicious tendency to identify Education with the School, just because the School seems so eminently plannable. I confess to experiencing cold shivers when I hear enthusiastic discussions of the possibility of planning from those who have no clear idea of what they are planning for.

The Neglect of Ideas

Of yet another characteristic of our new countries there will be, I think, no question. I mean the neglect of ideas and the life of speculative thought as such. I am inclined to think that this is a real trait of 'newness' and is to be expected, especially in the conditions of the Industrial Revolution. Further, I wonder whether the type of social order which has emerged in new lands has not as much to do with it as economic pre-occupations. Money and organization and planning cannot really produce original exploratory thought. Unfortunately I feel that the present tendencies in social development will make the prospects worse instead of better. For they all tell against that distinction and seclusion and reverence for the spirit that are so essential to the truly intellectual life. Universities do not really encourage it, though they make formal provision for it. The school system, responding to a mass demand for education, does even less.

Yet if the truly intellectual life is not honoured in the heart of the people, if it does not blossom easily and gracefully out of the social soil as it did in Athens, in mediaeval Europe and in patrician France or England, then a pretentious unreality must infect the whole educational system, leaving it pointless.

Of one other feature I need say little at this point, for it finds such ubiquitous expression in the educational organization of the new lands. I mean social solidarity. Nothing strikes the new country immigrant more than this. He, too, has known solidarity. But it has been for him a local or group affair. The massive cohesion of professed equals which he finds in the new land is a new thing. A great thing, too, I feel, in spite of all the exploitations and misinterpretations to which it is exposed. There is behind it a lively sense of common effort and common conquest in joint achievements undertaken by men just as men. And there is behind it also a conscious and resolute reaction against what is regarded as the cleavages and inequalities of old Europe.

Artificial Equality

I turn now, in the concluding part of my paper to attempt some estimate of the strength and the weaknesses of the new countries as co-operators in a world-wide undertaking of education.

I put first among the weaknesses that dislike of distinction and that shying away from excellence which is the result of the victory of the
mass. Here if anywhere is the Achilles heel of the new countries, the temptation to achieve equality by abandoning real standards of excellence. Their main mission is, indeed, to establish equality among men, but no society can persist without an elite; and if you do not set up and maintain the standards that will give you the elite you want, you will get one you don’t want and be faced by revolution. The task of the new country is to bend all its educational planning to the discovery and training of that natural aristocracy which is the first essential of true democratic life. The only alternative that I can see, among spirited peoples, is the establishment of a minority dictatorship of the Fascist type in the interest of excellence and to maintain real standards.

With this main weakness the others are associated: a certain indiscipline and bumptiousness: a readiness to mechanize and canalize the things of the spirit: a liking for the self-deception which pays itself with words. There is again a certain dislike of real intellectual discipline which is quite compatible with a high degree of laboriousness and truly colossal patience. The European disciplines, so irrelevant as many of them seem to the ostensible demands of modern life, have this as their real virtue. They purge a man of the last terrors of intellectual adventure so that, if he responds, he emerges ready for anything. Then, again, there is that under-appreciation of style and of what the Greeks called the ‘fine’ in personal habit and intercourse.

Spaciousness and the Experimental Spirit

I turn now finally to the pleasanter task of indicating some great values which the new countries can bring to the common stock. Chief among them is the great gift of social generosity in the attitude taken towards education. It has still not yet been proved that the solicitude of the old countries for excellence, for the emergence of the fine selected product, can be reconciled with the new country’s solicitude for the mass. But if they are reconcilable there is a better prospect of achieving the synthesis if we set out from a desire to offer the means of cultivation to all than if we begin from the old country scepticism about the possibilities of men in the mass. Allied with this generosity is a quality in the new country attitude and habit which I can best describe as spaciousness. I mean by that the large scale and comprehensiveness of the educational planning and the readiness to adapt. Those who know something of the excessively cautious, piecemeal, almost niggling way in which new developments are apt to be carried through in the old lands will appreciate what I mean by spaciousness. It is this quality which expresses itself in what is called the experimental spirit. I should hesitate to say that the experimental spirit is lacking in the old lands, but there is a sense in which it is a characteristic gift of the new countries. They can afford to be experimental as the old countries cannot. Conditions are still fluid and plastic, and the most promising schemes can still be regarded as tentative. They have fewer inhibitions about it and less reason to fear that too much freedom of experiment may prove socially inconvenient. Some peculiarities in the very idea of experiment in education go some way to justify the old country attitude towards it; but much of the suspicion is unjustifiable, rooted perhaps in vested interest or even in sheer indolence. It will be a characteristic task of the new countries to strengthen and sustain the free and fearless play of critical mind in the whole field of education.

For is it not yet another difference between the new lands and the old that the new have been so ready to place Education along with Economics and Politics as one of the fundamental human studies? Europe has little to show in this respect compared with them. Education may be more a thing of history and custom than the new countries yet realize; but they are showing that it is much more plastic and capable of rationalization than the old countries are disposed to admit.

The Challenge to Democracy

Finally, let us ask ourselves what is the challenge that now faces all who belong to the liberal tradition? Is not the issue clear cut? On the one hand there are those who look to the quality of the individual life as the ultimate criterion of social and educational forms, who seek to give release to the riches of the individual spirit so as to keep the sources of culture open.
On the other, there are those, Fascist, Communist and the rest, whose criterion is the standard citizen pattern and whose weapon is the moulding pressure of an authoritarian state. The nineteenth century presented democracy with its challenge. The twentieth century presents it with its difficulties. And we are beginning to realize that these involve problems of character even more than of intelligence. The problem before us is, I repeat, one of character first and foremost. There can be no character without tradition and discipline, without roots in the spiritual soil of the race and without settled dispositions of thought and feeling and action established in the early years. The new countries will assuredly fail in their mission if they cut themselves off from the deep and ancient sources of education itself. They will succeed gloriously if they learn to bring out of their treasures things new and old and to give to the old that new quality of their own—of warmth and universality and generosity—which will make of it the means for the healing of nations.

Lino cut by a young child, one of the many interesting examples shown at the Exhibition of Children’s Work arranged in connection with the South African Conference.
The Aims of Fascist Education

ERNESTO CODIGNOLA

The ideals of Fascist education had their origin in the movement which based itself upon the critical revision of the democratic-positivist standpoint. During the first twenty years of the twentieth century this movement finally led in Italy to a particular type of idealism in philosophy and, in the political sphere, to certain progressive movements, both syndicalist and nationalist. In the course of time it gradually acquired its own peculiar character and became more and more clearly aware of the initial inner impulse at work in its depths; it began to create, by means of trial and error, social institutions adapted to express this central inspiration.

The Antecedents of Fascist Education

The positivist-democratic principles of education—particularly in Latin countries—can be tersely summarized as follows: the supreme object of the school is to promote the spirit of humanism and pacifism, to bring nearer the brotherhood of man regardless of national frontiers, suppressing—even if it cannot abolish—racial and religious divisions, individualist traditions, narrowly nationalistic interests, etc. Education must be modern; it must pursue practical ends, giving preference to utilitarian subjects such as languages, scientific data capable of a practical application, social, economic and legal knowledge enabling the future citizen to understand the society of which he is to be a member. It must give up all claim to that abstract and aristocratic training of the mind—formerly the perquisite of small privileged groups. It must remain neutral in face of the disagreements of religious and political factions; it must bring up the children from the first to value the objectivity of that scientific view of reality which judges facts dispassionately, sine ira ac studio.

It was considered that the work of the school should be as far as possible independent of State jurisdiction, since this is always the expression of a fortuitous political policy enforced because of the temporary power of a political party, and it therefore tends to oppress minorities. In fact, the school's primary aim was cathartic, to use an Aristotelian expression. Education had to free the mind, from the very first, from those social, religious and political prejudices, from those idolatries which are unconsciously set up for children by the family, the Church, the political parties, and which are the chief cause of discord among men, of inhuman persecution, of humiliating bloodshed.

This conception of education is the result of a simple, optimistic view of life which can be called illuminism because it found its clearest expression in the French illuminism and encyclopaedism of the eighteenth century. This view dominated education long after it was abandoned in its philosophic form. In fact, it is still prevalent in many educational circles in Europe and America. It fails to take account of spiritual life, with all its implications and subtleties, and in proclaiming the liberty of the individual it ignores the autonomy of the spirit which lies at the root of the more profound modern educational theories. Its claim to reduce all the manifestations of the spirit to the procrustean bed of so-called reason—which is really only the intellectual abstraction and analysis peculiar to natural and mathematical sciences—has often dried up the most vital and fruitful sources of human experience, has cut off the school from life itself, and has produced withered little walking encyclopaedias instead of vigorous personalities deriving their strength from real human interests and strong national traditions.

At the dawn of this century, Italian idealism adapted and deepened the criticism which German idealism and romanticism had already levelled at illuminism. In a few years, it was completely victorious. Reason and Truth, this idealism declared, are not objective data or abstract schemes, but are one with spiritual life in all the richness of its expression and all the complexity of its historical development. The methods employed by the sciences, which at bottom constitute the ideal of positivism, cannot really be identified with the workings of the human mind itself, since they are only one aspect of mental activity and the deepest human
experiences of art or religion remain outside their sphere. Religion in itself is not a mere tissue of lies or illusions: it is a special intuition of the truth which philosophy can investigate from a speculative point of view, and may add to—in a philosophic sense—but cannot discount or disprove.

Education and Reality

It is impossible to remain neutral in face of the central problems of human life. Neutrality here is only a sign of indifference or hypocrisy. The school certainly has a cathartic function but it must not substitute for the content of concrete experience a purely intellectual and abstract content which is fatally destined to remain external and artificial since it has no connection with any vital interest. The sole object of the school must be to help the pupil to take possession of the real world about him, as Pestalozzi demanded, though many educators who claim to be his followers forget this. The school which does not do this destroys the roots of life, produces pretentious and dis-contented "déracinés"; in fact, it dis-educates instead of educating. Real life, for which the school should be a preparation, is neither purely intellectual nor purely economic; it has nothing to do with abstractions; it is something infinitely richer and more varied. Within it, all the really vital interests of man, from art to religion and from politics to science, must find satisfaction and expression.

That is why the great educational reforms carried out by Gentile in 1923 did away with all mere utilitarian considerations (except, of course, in technical and professional schools); that is why we have accentuated the humanistic character of our secondary schools; that is why we have introduced Latin into the general curriculum (for the classics to us are a living tradition); that is why we lay so much stress on aesthetics and philosophy, believing them to be of the utmost importance in the 'human formation' of our pupils. And that is why we do not want a false school of pacifism or one that is abstractly humanitarian and universalist. A virile and realistic education which does not play with abstract generalizations but is determined to face life honestly is the best safeguard of peace. We believe that only those men and women who are ready to defend their own hearths will be prepared to defend the interests of humanity. Pacifism may be as fatal to civilization as the brutal domineering spirit of Prussian militarism. If we are to educate for peace we must give boys and girls not only a vivid sense of their own dignity and their own task, but also a respect for the special task of other nations and for the historical difference which at once separate and unite us. We must convince our pupils that history is one great effort of collective co-operation. This will only be possible if each of us, whether nation or individual, is conscious that he is not merely copying the work of others but is accomplishing something personal and original. Just as the best citizens are those who began by taking an active part in family life, so those nations who have contributed most to civilization are those who have proudly loved and tended their own spiritual patrimony and have jealously preserved their own peculiar characteristics. That is why we believe it pernicious to attempt to subordinate all education to the formation of the so-called reason. The less we talk about reason, the more we allow the spontaneous exercise of all the faculties of the human mind, the more reason will flourish. The universal has no existence apart from the particular which gives it life and soul. Education must develop the peculiar characteristics of both individuals and nations and it must never attempt to reduce them all to the same level. The real uplifting of humanity should not mean the destruction of the source of all originality, all spiritual interests, through which alone life has any real value.

School and State

Finally, we consider it absurd for any school to claim to be independent of the State, whether it merely remains outside it or is hostile to it. Our ideas, necessarily briefly and dogmatically stated in so short a space, do not imply, as the careless reader might imagine, that the school should be nothing more than a channel for spreading an aggressive national chauvinism and militarism. Nor does it imply that the school should override the sacred rights of the human personality in favour of a monstrous and oppressive state regimentation. These are dangers which our educational movement has
to face, but what movement is not beset by dangers unless it is on the alert against them?

The ideal of the independence of the school, recently defended by many democrats at the International Congress of Secondary School Teachers at Rome, is self-destructive. The Fascist ideal, set up by Mussolini, is deliberately opposed to it: ‘Nothing against the State; nothing outside the State; everything for the State’. This can certainly be interpreted narrowly and unintelligently, and so lead to the sacrifice of personal individuality. But this is not a sufficient reason for ignoring the fact that the State is the concrete realization of corporate human life and that it should be given its full weight, even if we wish to affirm also a wider brotherhood among nations. One may oppose a particular form of state organization in the name of a higher principle—which consciously or not we do every day—but we shall not escape from social evils by depriving the State of one of its essential organs, the school. The Fascist State, like all other historical realities, has its dark as well as its bright side; but it has made every effort to carry out its duty as completely as possible. No other democratic State has done more, not only for education but for every form of social work, including maternity, infant and adolescent welfare. The Opera Maternita e Infanzia, the Opera Balilla, in spite of their limitations and defects, have worked miracles in protecting the younger generation. No nation has in so short a time and in such difficult financial and economic circumstances, created so imposing a network of institutions designed to effect the spiritual regeneration of its youth.

Religion in State and School

Fascism has introduced instruction in the Catholic religion in elementary and secondary schools. The cry has been raised that it has ignored one of the most vital truths mastered by the modern mind—the concept of the secular character of the State and of public instruction. But in what sense do we use the term secular? Do we use it in the polemical and negative sense, as our forefathers of the sixteenth and seventeenth centuries did? Or do we use it, as we clearly should, in a positive and organic sense? In other words, must the State, if it is to be truly secular, assert its character by banishing religion, opposing it as truth does error? Or should it allow religion to explain itself freely, realizing that it cannot justify itself by an appeal to a transcendental and external power, but only by an appeal to its own intrinsic and rational nature. We may conclude that the secular point of view is one which justifies and understands the profound significance of religious experience and therefore does not deny religion its place in the school.

This is a brief summary of the core of the doctrine and the inspiration on which Fascist education is based. None know better than we the defects of our organization, the inadequacy of our performance compared with our ideals or the dangers which confront our education, as indeed they confront all popular forms of education. But only those who understand intimately the spirit that inspires it, will be able to pass a historically fair judgment upon it. Up to the present we have heard too many voices raised in unintelligent condemnation or praise.
Education follows Social Change in Germany

K. VON DÜRCKHEIM-MONTMARTIN

It is difficult to write or speak frankly about the new Germany for public opinion is still influenced mainly by those who are anxious to decry National-Socialism, while the Press is still ready to hinder the growth of any understanding which would improve the world's attitude to Germany. This state of affairs is further aggravated in the realm of education by the fact that some of the German educationists most closely identified with liberal educational ideals were the unfortunate victims of the great political change.

Nevertheless, liberal-minded educationists of other countries will, I know, make a sincere effort to understand the new Germany and her educational system and will approach the subject in that spirit of tolerance which they so strongly advocate. For many of the most important speakers representing The New Education Fellowship have stressed the fact that there is something to be learned by progressive educationists even from systems of which they cannot wholly approve.

If we are to understand the changes which have taken place in my country, we must keep in mind three fundamental points. In the first place, we must remember the increasingly difficult position of post-war Germany, the social and moral degeneration resulting inevitably from the war, the so-called peace treaty, the revolution of 1918, the inflation of the mark, the inefficiency of twenty-three consecutive governments and the lack of cooperation between thirty-eight political parties. Secondly, more and more people began to realize the danger which threatened the German nation from excessive individualism and lack of unity. Thirdly, the people themselves began once again to be influenced by the traditions of their country and by the ideals and beliefs which spring from, and are expressed in, her great national culture.

Germany's New Faith

It was through the spread of true socialism allied with an ardent and sincere nationalism that my fatherland found the solution of her difficulties, for the combination of these two ideas at last united those old enemies, the pure nationalists and the pure socialists, and set before them both the ideal of a national Folk-Community. Out of despair, discord and defeat, a new faith arose like a great light in the darkness. It is essential to realize that there is a new faith alive in Germany to-day. In these sceptical times, it is hard for anyone to believe that there can be a new and living faith in any country and that such a faith can enable a nation to re-organize its life. Yet owing to this faith, an astonishing reduction in unemployment (from 6 million to 2.5 million) was achieved in only fifteen months. In the realm of education, it is particularly important to remember the power of this new faith; otherwise swift changes and the introduction of new methods, carried through enthusiastically because of it, might seem to be due merely to compulsion.

Wherever faith is really alive in men, an inner urge compels them to make sacrifices in its cause. In the new Germany, the first people who were ready to make sacrifices in the struggle against the dangers which menaced not only my fatherland but western civilization as a whole were the storm troops. In their heroic defence against Communism, they became the first real educational organization of the new Germany. For from the ranks of the brown shirts emerged men whose life is duty and service and who are ready at all times to sacrifice their lives for their ideals.

Education rooted in such a faith must recognize certain fundamental principles, and before we can appreciate the present system of education in Germany, we must know what these principles are. They are two, the principle of individuality and the principle of unity.

Education and the Folk-Community

Every living entity is a united whole, to which each separate part brings its own contribution. The highest expression of such a living whole is a nation, a united entity retaining its
own particular characteristics. Our nationalism recognizes the real, living, united Germany; and her special character—due to her racial composition, her geographical situation and her history—which is expressed in her own particular culture and her national forms of social life. Our socialism recognizes the organic unity of our nation and sees each citizen not as an isolated unit but as a part of a living whole. National-Socialism is the expression of these two ideas and these are incorporated in our Volksgemeinschaft, or Folk-Community. For us, our Folk-Community—Germany—is the highest value in life. Our view of the world is based on our conception that our people, taken as a whole and not as individuals, are of supreme importance. It follows that the value of the individual depends on his value to the nation. And as education means primarily the formation of individuals who are of value, it follows that our education means primarily education for the service of the nation. Our whole system is the expression of our attempt to reforge the people, and especially our youth, so that they are able to contribute to the value of the nation and so that they may develop in harmony with the special character of their country. We are convinced, for instance, that perfection in any branch of culture can only be attained in harmony with the particular spiritual trend of national thought. And we also realize that the creation of a true Folk-Community can only be attained if its members are held together, not by brute force, but by bonds which are forged by common racial ties, a common history, a national culture.

These are the basic principles of our National-Socialism which aims at the preservation of our race, the destruction of undesirable elements, the diminishing of alien influences, the development of our own characteristic way of life and which teaches service—the service which each member must render to the whole. Our educational system lays particular stress on our national culture, the beauties of our countryside, the splendid traditions of our history. There is no school camp in Germany to-day which does not strive to make the spirit of Germany come alive in each individual instead of setting first the development of each child’s individuality.

What of Personal Freedom?

But, so many people ask, can there be freedom of personality in Germany to-day? It seem so difficult to make people understand that freedom of personality does indeed go hand in hand with our new faith. Yet where in the world is there a nation with a greater tradition of personal freedom and a deeper philosophy of individuality? But there is also no nation which has had a greater experience of the dangers of individualism. Germany does not deny individuality—she merely denies the value of pure individualism.

Individuality is important, but the individual as such is not. That implies more than a mere rejection of egoism, which no system of education could possibly uphold. But there is a philosophy of education which teaches individualism and in which the personal development of each individual is the primary aim. It makes the mistake of considering only the happiness of the individual without being really interested in the fate of the nation. And this system produces the so-called educated man whose education and achievements have made him hostile to his community. Such people would even assert that the acceptance of one’s own country’s attitude to the world is narrow and prejudiced. But the individual who severs, or at any rate loosens, the link with his country and seeks only to develop himself seems to us dangerous and unsatisfactory.

According to our traditions, freedom of personality is not rooted in the mere independence of the individual, but in his acceptance of certain values for which he is prepared to make sacrifices. Freedom to us means primarily freedom from selfish motives, freedom to understand and to serve the good of the community. Of course, the individual must also realize himself, but he must do this through understanding the bonds which bind him to his community. The rights of the individual mean to us his right to accept responsibility, his right to serve his ideals, his right to sacrifice himself for them.

Since the nation represents our highest value, education is directed towards the formation of character, of individuals whose personal freedom is limited by their conception of their responsibility to the nation as a whole. The
central aim of our educational system is therefore to produce men and women who are fitted for membership of our community and prepared to co-operate and to give practical service, each according to his own vocation. Our system makes each man or woman absolutely and personally responsible for carrying out his duty to the community, and this is the essence of leadership. Through leadership, based on the individual’s acceptance of membership, each man or woman can develop his or her personality to the full.

Abolishing Intellectual Arrogance

One of the greatest obstacles we had to overcome was a false scale of values. For instance, in education we were up against the idea that money, titles and degrees give a man a higher standing than his fellows. But to-day public opinion, inspired by our common faith and task, has changed. We believe that the value of the individual depends only on his value to the nation; each man or woman is judged according to his or her services to the community. These new standards are being inculcated in our young people in many ways; there are numbers of meetings and organizations which bring together men and women and young people of all ranks.

We can say, therefore, that we have abolished intellectual arrogance, together with its cause—the over estimation of a scientific education. This attitude not only erected artificial barriers between the so-called educated and the so-called uneducated, but it led to a struggle for degrees and certificates. How many really ungifted children have had to suffer because of the academic ambitions of their parents, and the false value set on degrees! To-day we realize that a farmer, rooted in the countryside and serving the nation truly, is of far greater value than a professor who has lost his roots and disappeared into the thin air of irresponsible intellectualism. In the new sense of the word, a farmer can be far more truly educated than a professor of agriculture and therefore the primary school is of the utmost importance, while the high school and the university are open only to those who have academic gifts.

A short time ago we were faced with the tragedy of seeing ten thousand unemployed graduates walking the streets. To-day, the number of students in our universities is limited by law to a number corresponding roughly to state requirements and the openings which need to be filled. Only the most highly gifted can obtain special permission to enter a university or the Hochschule für Lehrbildung. The university is losing its purely intellectual character and becoming a training school for the leaders of the nation. It is not even open, therefore, to everybody who can prove his intellectual ability. Leadership is based on comradeship: the man who is not a good comrade and member of the community will not make a good leader. And so everybody who wants to enter a university or Hochschule für Lehrbildung needs besides his matriculation certificate and another which proves his special ability, a third, which shows that he has been a satisfactory member of an Arbeitsdienst or labour service camp for at least six months.

Here the students have to work side by side with their unemployed comrades, without any respect for class distinctions. Teacher training, too, starts in the labour camp. The man who is incapable of comradeship will not be accepted into the community of future leaders. The work in these camps is hard for fields must be drained so that more land is available to relieve overcrowding. Thus a student’s first step is not, as it was previously, a happy time filled with pleasures, but a time spent in manual labour, side by side with the worker. Needless to say, the son of a minister, a noble, or a rich man, has no special privileges or advantages, while it is absolutely impossible for the highly gifted son of a poor labourer to be hampered in any way.

Camps have proved such a valuable instrument in this training for true citizenship that many different kinds have been started,—school camps, sports camps, and so on. All students and most teachers and professors spend some of their time in this way. This type of training begins at an early age; most children belong to the Hitler Jugend, where they receive a disciplined group education and at the same time are able to enjoy the beauty of the German countryside.

Helping the Child to Face Hardship

National-Socialism attaches importance to
the authority of the teachers and insists that education should have a definite social aim; hence many people wonder whether we approve of methods which correspond to the child’s own requirements, or whether we refuse to consider the child’s point of view. But National-Socialism merely disclaims the idea that the child is the aim of education; the real aim of all true education must be to make each child a valuable member of his folk-community. And we also believe that it cannot be right to save the child from all the difficulties which beset it, but rather that the finest education and the most able teachers will confront the child with situations in which he can gradually learn to overcome his difficulties. Children who learn entirely through a play method tend to become weak; and we need a hard and sturdy generation to overcome the rigours of modern life and help Germany in her struggle for self-realization. It is surely better that some weaklings should be left behind than that a whole race should be spoiled by a system devised solely for the benefit of the weak.

Our inexorable struggle against overweening intellectualism is on a par with another great movement, the movement in favour of the farmer. Our peasants are the very salt of our nation. Therefore the state lays particular stress on the need for prosperous farmers, for they form the best basis of a sound national community. Festivals and meetings are held in honour of the peasant, and these, together with films and wireless talks and instruction in all our schools, have very greatly enhanced his standing in the eyes of our people. Folk-lore and excursions into the country give our children a closer knowledge of country life; for one of our greatest problems has been to devise a method of linking up our young people—especially those in our cities—with our peasants and our countryside.

**Linking Townsmen and Countrymen**

Perhaps the most ingenious law introduced by our Minister of Education concerns the *Landjahr*. Children from the cities have to spend one year in a country home after leaving the primary school. They go in groups of thirty to a hundred and twenty and the expense is borne by the state. It is essential that they should really have roots in at least one corner of our country. During this year, the usual curriculum of the primary school is abandoned and the chief object is to give the children a respect for the peasant and an insight into his life. This year we started the scheme with 22,000 children only, because we were unable to train more than 1,800 young teachers for this special task. These teachers are trained in camps where they have to learn how to set up an organization in which co-operation and good comradeship can really be achieved. The *Landjahr* not only serves to give our children roots in the country but also helps to strengthen the unity of our folk-community by breaking down the traditional barriers between town and country dwellers.

**Educating for Peace**

This short account may give some idea of our educational system and its purpose. There is one other point on which I must touch: Is our education, as many seem to think, a danger to the good relations between ourselves and other nations and therefore a danger to world peace?

We believe most emphatically that this is not the case. Nationalism by itself is in danger of becoming imperialism and sets itself in opposition to other nations. Socialism by itself is in danger of becoming bolshevism and a peril to western civilization. But German National-Socialism is based on the recognition of the special characteristics and particular value of national life; hence it leads to the recognition of similar values in the national life of other countries. Our children are taught to understand this and to believe that all nations must live in their own characteristic way, and yet at the same time must learn to respect and help one another. We do not expect other nations to accept the gospel of National-Socialism as we understand it, but we do expect other nations to respect our methods and to acknowledge the right of the German people to develop in the German way. And we believe that an ability to recognize the special contribution which every nation brings to the life of the world must in the long run bring about peace more surely than any attempt to abolish the individual character of each nation.
During the past twenty or thirty years, 'leadership' seems to have become increasingly prominent in our thought. This emphasis is no doubt due in part to the breakdown of certain democratic traditions. We realize that we are unable to leave everybody to himself to determine his own course of life, and that we are equally unable to find for all a single compelling authority, or a universal guiding principle. Moreover, leaders do arise, and do make themselves felt, while the rest of us appear to be pulled and pushed in spite of ourselves, for better or for worse.

The leader has always aroused admiration, at least in the abstract and even from those who abhor the ideals and purposes of particular leaders. We are curious then as to what makes leaders, sometimes perhaps in the hope of making more of to-day's children, or certain ones, into leaders for to-morrow. We cannot help asking ourselves: Must some of us always be leaders, and others followers? What is it that brings about this separation? Are we born that way?

These and other questions we cannot avoid. But neither can we answer them, at least categorically. In extreme cases we feel no doubt: we see born leaders, who are spontaneous, irresistible; and we see born followers, men and women born to be slaves. For the majority, who stand between these extremes, the classification is not helpful. There are many kinds of leaders: and leaders themselves are influenced by others, whom they follow more or less consciously. We have to be clear as to what values we attach to leadership, what its limitations and dangers are, as well as its possibilities and advantages, what leadership costs and what returns it brings, both to the leaders and to the followers.

**Domination**

If you bring two chickens, or two babies, or two dogs together, one of the pair will almost invariably assume a dominant rôle, and will tend to determine for the other many details of his conduct. The same dominant individual, placed with a third, may turn out to be a very submissive; and conversely, the one who was overawed the first time may assume leadership when placed with a different mate.

The individual boy or girl in whom we happen to be interested may indeed submit to more of his companions than he dominates; or *vice versa*. The important thing is to recognize that leadership and followership are not absolute qualities. Whether a particular individual will lead or follow—in the negative sense—depends upon the make-up of the group in which he finds himself, and upon the demands that are made upon it by tradition or convention, or by external pressure, as in the case of economic hardships or hostile neighbours. A timid boy or girl, who never speaks unless spoken to, turns out to have a wise little head; and the companions make use of it on special occasions. A deaf musician who never heard his compositions played continues to influence music-makers for a century after his death. There are many forms as well as many kinds of leadership.

When we look at boys and girls in the course
of their growth we can already recognize traits that will determine their positions in relation to others. It is impossible for more than one boy or girl to stand at the head of a given line, or to be captain of a given team. But almost any group of children can furnish opportunities for many leaders. It is by no means necessary that all of our movements shall be in single file. We need not insist that all measurements be made along a single straight yardstick.

The fact of individual differences means that every child is in a sense unique. This has its disadvantages, when it comes to managing a class or any other group, when mass control or unity seems necessary. The problem of education, like the problem of social living, is to make the best possible use of existing differences, to take advantage of the distinctive traits and characters.

Comparisons

Problems of adjustment appear very early in the life of the child. Parents and other elders almost invariably respond to observed differences among children by way either of resenting them or of taking pride in them. The least significant differences are thus made to carry a load of parental emotions. If we cannot boast of the child’s superiorities, we invite compassion because of the child’s handicaps. Comparing means appraising, whether it is the colour of the hair or the appetite, physical strength or the number of acute infectious diseases suffered.

For the most part such parental gossip does not directly affect the children. But comparisons which are made in order to influence them, and which manifest the same spirit, are potentially harmful. One father conveys more than a hint of reproach when he praises the neighbour’s boy for his fine posture and broad shoulders. A mother wonders petulantly why her daughter cannot get the grades in school that her sister or cousin gets. Another parent belittles the child by means of enthusiastic applause for some strange child’s singing.

Comparisons are of course unavoidable; but there are certain implications which parents should learn to exclude from the necessary comparisons. These implications in effect make the child feel either unworthy or else challenged to do something for which he feels no need, something that is perhaps even beyond his ability. It goes without saying that children do need both guidance and stimulation. One task of parents and teachers is to stimulate children without making them feel inferior, without misdirecting their energies. And another is to help the individual discover the forms of activity and relationships that yield the fullest satisfactions, that make the fullest use of the latent talents and capacities.

We often observe the lack of those qualities that make for leadership in the shy child, the boy or the girl who is uncomfortable in the presence of strangers. Such a child prefers to be left to himself, although he may suffer equally painful discomforts when so left, from his sense of difference, from realizing that he does not quite fit in. This shyness is obviously an indication of something deficient in the social adjustment, to say nothing of leadership. What brings it about? In general the otherwise healthy child is driven in upon himself, or what is the same thing, driven away from his companions and associates, by a sense of inadequacy. He has come to feel that he does not measure up to normal in one way or another. He may be exceptionally clever in some things, but if he has been humiliated for his deficiency in another direction, the effect may be the same as a genuine and serious deficiency. What will happen in any particular case is thus unpredictable, since it does not depend on the child’s native capacities alone, but also upon the talents that happen at the time to be at a premium in his community, and upon the way those around him treat his uneven assortment of advantages and disadvantages.

In the ordinary household and in the ordinary neighbourhood and school surroundings a certain proportion of the children will almost certainly be made to feel inferior although they have all the essential equipment for a reasonably happy and effective life. In one group a particular child is forced in upon himself because he is not very skilful in athletic sports; in another group this same child might become a leader. Or the outcast is the one who never finds appreciation for his sagacity on the trapeze. A potential artist is forced to do her
drawing surreptitiously. A boy with musical gifts is made by his companions to feel that he is a milksop.

In the home there is always a danger of similar effects being produced. Where the parents are ambitious to have the children shine scholastically, they urge one who is backwards in school to greater exertion, by pointing to the older child who takes it all in his stride. But they may succeed only in forcing the laggard to concentrate his efforts on undertakings that yield him satisfaction but that cause the elders even more annoyance than his backwardness. He may find solace among less exacting companions, with whom he can shine. Or he may be forced to swagger and pretend that there is nothing of worth in the books, that school is all nonsense, that only boys who are no good at manly things, like fighting, care about books—which all has some truth in it.

Compensations

The child may compensate—and avenge himself—by making a virtue of his shortcomings and by glorifying whatever resources he may have. In effect, the logic of the child says: I am not good in spelling, but who cares about spelling! Can that good speller match me in running, or in casting a fly, or in fancy dancing? In seeking to compensate for his humiliation the child may become even more aggressive. Not content with boasting of such merits as he has, he turns his resentment against the disparagements into positive dislike of those who receive the approvals denied him.

The school bully is never the same boy as the 'teacher's pet.' On the contrary, he is the energetic, and healthy, and probably capable boy who seeks the approval and admiration of his companions outside the class because inside the class he is a nobody. From the child's point of view, it is no more reprehensible to manifest his skill and courage and prowess in his best manner, than it is for the 'good boy' to seek satisfaction by striving for the teacher's praise. The snob is essentially in the same position. He makes a virtue of his own treasures, affecting disdain for those who do not share his tastes, his preferences, his prejudices. The bully is obliged to separate himself from the conventions in order to save his self-respect. And he becomes a leader among the like-minded. There are many little girls and boys who feel just as he does, but who lack the courage or energy or initiative to assert themselves. The snob similarly detaches himself from the common life, in which there is no adequate appreciation of his special qualities. If he does not become a leader it is only because his combination of qualities and resentments is rarer. In neither type of reaction do we find the kind of leadership that draws large followings; but again that depends on the particular type of combination of circumstances. A coterie may become a powerful 'movement'; a gang may become a dangerous mob.

A large part of the difficulty comes from our lack of general agreement either as to the kinds of prowess that should be required of all, or as to the range of variation that we are willing to accept and tolerate, not to say encourage. The rivalries set up early in the child's life are seldom of a kind that will give all concerned adequate opportunity to cultivate their native talents and to manifest them in a favourable atmosphere. If this particular child happens to have intellectual or artistic qualities above the ordinary, he may still be handicapped by having them praised among his fellows who cannot follow his lead because they cannot sympathize with his outlook or methods. On the other hand, skill in organizing and managing groups is utterly wasted in an environment that stresses individual distinction in some study, or in some technical pursuit.

Leadership in its Early Stages

Leadership first and best shows itself in play. It demands a certain common interest and a freedom to cultivate those interests unresisted by the preconceived notions of the elders or by conventions remote from the genuine concern of the youngsters. That is why leadership among children has heretofore come to the surface more often among the disapproved 'gangs' or on the borderland of delinquency than among the regularly constituted groups of the school. On the playgrounds of good schools we see this often. Among more capable children and young people leadership frequently takes the form of revolt against the conventions—in harmless mischief, or in more serious rebellions.
These strains between the individual and his associates point to conditions that obstruct the development of essential satisfactions. The child needs the opportunity to express himself. Too often this is feared by parents and teachers, since there is no knowing in advance how the child is going to discharge his impulses; and we do know that in such 'freedom' there is danger. Yet self-expression is still essential. The child demands release from the impulses, even the impulses we fear. He needs the satisfactions that come from the activity and its effects. The personality, we may say, seeks to impress itself upon the surroundings: the ego must gain the confidence that it can determine events, that it is not bound to submit always to what is imposed from without, whether by the people around or by the natural course of events. And finally, the child craves recognition from others, the unmistakable acknowledgement of his prowess or achievement. Giving children the opportunity to express themselves is thus no simple matter of letting them alone to their own impulses and devices.

The child must have the opportunities to express himself, and yet he must be constantly guided without being repressed. This calls for much more skill on the part of teachers and parents than either abandoning him to 'nature' or forcing him into predetermined conventional patterns. It calls for understanding and discrimination: the adult must be mature enough to have standards, to realize what is involved in various actions, to foresee possible consequences. And yet he must be sympathetic enough to sense the child's longings and motives. Without imposing adult domination we must supply the child with the security of adult confidence, the assurance that he is understood and loved, that he is being guided and helped rather than repressed and thwarted.

Leadership and Democracy

The problem of leadership gives us special concern since the democratic tradition makes it impossible to reconcile the notion of equality with the fact of individual differences. It is as if we were obliged to insist that by trying hard enough everybody could run faster than everybody else. Because of the inequities and disasters that selfish and unwise leadership so often inflicts upon the masses, we are torn between the hope of doing away with leadership altogether and the hope of making everybody a leader. Neither alternative is possible.

Our efforts to extend to everybody the opportunities for a fuller life that modern technological and social advances seem to make possible have often led to the disparaging of leadership of the domineering or masterful type. Various experiments are under way in a search for new patterns of joint living that avoid the injuries of such impositions of the strong upon the relatively weak. We have heretofore assumed that it is possible to raise children in groups so as to get from them cooperative action, as in committees for example, and without permitting any individual to attain prominence unduly. Yet this is apparently an impossible undertaking. Even where children are protected against the destructive effects of rivalries, as in some homes, it is impossible for the group to act as a perfectly homogeneous unit. There is merit in taking counsel or in talking things over only because each has something distinctive to say.

If anything is to be done somebody must take the initiative: and no two will show initiative to the same degree in regard to a particular problem. While Mary is quick to see the chance for mustering her playmates for a game, Victor is quicker to suggest the game that the other children will prefer. Indeed, the leader among children on the playground as well as among the larger children whose doings have been written down in history books, is very often only that one who is so in accord with the common sentiments that he can get his following by merely voicing what everybody already feels and thinks. It is not originality, or invention, or great vision that such a leader manifests. On the contrary, his principles are usually the tritest of platitudes, his appeals are to the lowest of impulses, his arguments but childish repetitions of stereotypes that arouse in spite of their lack in logic because they insinuate ideas about which people feel strongly.

If we recognize that 'leadership' is not something to cultivate by itself, or something to fear or destroy, we must turn back to ask what individual boys and girls need for group living that on the one hand protects the individual
against abuse by more aggressive and calculating companions, and that on the other hand brings out the talents for the common good—including the talents of the calculating and aggressive.

Self-Assurance and Self-Criticism

We assume first that the child has to be allowed to grow up with a sense of security that is not shattered by the appearance of a more aggressive or more domineering personality. This means an early acceptance of differences without fear, without apology. Yet there must be a positive side, too: it is not sufficient to sing the sour-grapes song, or to accept inferior status fatalistically. It is necessary for the child to discover that he can do something worthy—not something as good as somebody else can do, but something worth while regardless of what others can do. This calls for encouragement in the cultivation of a variety of potentialities, and the progressive specialization in one’s forte. With this self-confidence, however, there must come self-criticism: differences have to be accepted without pride or arrogance, as well as without fear or humility. It is necessary to guard against a too cheap complacency. But criticism again must avoid the invidious: the goal, so far as possible, must be in terms of the individual’s growth and capacity rather than in terms of competitive achievement. Each must learn to measure his growth against his own past performance, rather than against another’s doings.

With the discovery and cultivation of special interests and activities in which the child can find satisfaction and from which he can obtain recognition, there comes the further need for acknowledging and admiring what others are doing. Each child has to learn not only to express himself but to be sympathetic to the expressions of others. In a universal sense this is of course impossible. But in practice, within the family, in school, on the playground, the leadership of the elders can very well direct appreciations so that they do not leave any bitterness. For the social significance of the individuality we thus emphasize lies in making available to all the specialized skills and divergent inventions of particular individuals. Noblesse oblige comes to have real meaning, without condescension on one side and without humiliation on the other.

In short we have to avoid the invidious implications of demanding that any individual be like some other; and we have to find for the individual ways of making the most of his resources. The problems come early in the home life, in relation to the numerous tasks that children can do by themselves or share with their elders, or perform together. Our handling of the child’s relationship to his friends, the sportsmanship we expect from his games, the casual words or gestures of approval or disapproval, all contribute toward strengthening or weakening the child’s self-confidence, his self-esteem, his determination to improve or his resentment of criticism. Parents and teachers, as a result of their own fears of what might be, their own eagerness, are apt to introduce more pressure than is needed, and so often defeat their own purposes.

If we can clarify our own ideas both as to what is possible and as to what is desirable, we might worry less about the leadership as something by itself beneficent or harmful, and concentrate on the continuous adjustment of each particular individual to the unavoidable necessity of giving and taking in all his relations: for that is the only alternative to a state in which some always take and others always are forced to yield.
More About Art and the Child
TO THE ART TEACHER

DEAR COLLEAGUE,

If your children are not working standing at easels while music is being played, get down to it at once, and know one of the happiest of your experiences.

I have always considered that the moment one was really sure of something was the moment one knew nothing about it, but, since 'consistency is the hobgoblin of little minds', I am going to persuade you to pursue a course which will, I hope, convince you that this time, at all events, I am justified in being sure. You will be as enthusiastic as I am when you have seen the miracle of integrating personality resulting from creative impulse. I am writing to you only of children of from five to ten years of age, because I consider that what you do with them, or enable them to do for themselves, from the age of two and a half to the age of eleven, is far more important than what happens after.

The completion of an experiment this term with fourteen children from the Children's House at St. George's, Harpenden, children averaging six and a half years of age, has convinced me after nearly twenty years of experiment and thought on the subject that I can at last be sure of the following:—

(1) That though at the age of four or five the child does little more than scribble, in that scribble lies hidden the forces of his development, and that he should be encouraged to pursue it in an organized way, with large brushes on large sheets of paper with pools of colour;
(2) that between the ages of five and ten the child passes through a period of artistic illusion where he sees in his work not merely what it represents, but an image of fancy at the back of it;
(3) that this is the golden period for the development of the power to create artistically;
(4) that the reciprocity between the power to produce and the power to appreciate, or the power to give out and the power to take in, roughly represented in the diagram on the opposite page is a general law of development;
that the body is the instrument through which the process of creation occurs;
(6) that drawing is a gesture, a movement of the whole arm swung freely from the shoulder;
(7) that a man or child can no more draw with a sharp-pointed pencil on a small piece of paper, sitting in a cramped position at a desk, than he can play the fiddle sitting in the back seat of a baby Austin;
(8) that whether a man be wielding a cricket bat or a paint brush the success of his performance depends in each case entirely on the unification of the independently acting parts of the organism (Hormic theory);
(9) that the conditions under which the organism tends to integration in varying degrees, producing correspondingly varying degrees of virtuosity, are those of emotion, excitement, desire;
(10) that music is an immense help as an integrating power, unifying the physical, mental and spiritual being;
(11) that by shifting the emphasis from the production of neat drawings, pictures, and the gaining of diplomas, to the child and his development, we should arrive at some technique for furthering his emancipation and enabling him to become that extremely rare object, a real person.

To me one of the most important aspects of this teaching is that it takes the child's psyche into account and is, therefore, of therapeutic value. It is most essential to maintain or restore a state of harmony between the physical and mental being; and this can be definitely achieved by enabling him to express freely his own ideas and emotions through the unhampered use of his body, thus gaining kinship with the universal order of things.

The teacher's business is to maintain an awakened spirit in the child by encouraging him through the use of his imagination to find the language of his inmost being; it is the awakened spirit, the true bulwark of the soul, that will help him to withstand the destructive forces of some of the worst aspects of our so-called civilization.

It is well to remember that it is the ingredients of art that matter and not the art itself, and that beauty of colour in textiles.
fruits, flowers, and glass, in a well-lit white-walled room is a far more vitalizing and stimulating environment than plaster-casts and reproductions of old masters. I suppose it unnecessary to add that no still-life group should ever be set up for little children to copy—however, I've said it, and I'm glad.

In conclusion, a word about the music. Some people would, I know, maintain that a personal performance on violin or piano is, for occult reasons, more valuable than wireless or gramophone. Be that as it may, I consider that well canned music is of more value than an indifferent personal performance. I have a perfect radio-gramophone and have experimented with different kinds of music and jazz. The latter is extremely unsuitable since it merely makes children jig about on their feet and wave their pencils in the air. It seems to affect their minds through their bodies, whereas music affects their bodies through their minds. The difference between work done with music and work done without is marked. Try movements from Beethoven and Hayden symphonies and such pieces as Dvořák's slavonic dances, and the effect upon the rhythm and breadth in their work will be demonstrable.

I have never before seen such marked progress as in the set of drawings made by those fourteen children.

Yours faithfully,

L. van der Straeten.

---

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SOCIAL EDUCATION AND THE SCHOOLS

STATEMENT BY N.E.F. GROUP

ONE-DAY preparatory conference concerned with this question took place in London on 6th June last, and brought together a group of English educationalists interested in the subject who will be taking part in the Regional British Isles Conference of the New Education Fellowship, which is to be held at St. Andrews from 13th to 23rd August 1935. A thirty-page memorandum had been circulated beforehand, and as a result of the meeting, the following statement was drawn up by a small committee and unanimously approved by the members of the Conference. The names of the signatories will be found below.

The Task of Social Education in a Democracy

"Convinced that the character and methods of social change ought to be determined, both nationally and internationally, by reason and sympathy rather than by force and passion, we believe that one of the greatest dangers to the continuance and extension of democracy lies in the fact that the schools have not fully realized their responsibility for training the rising generation in the intelligent understanding of the affairs of the contemporary world. As a consequence boys and girls, when they leave school, are not sufficiently aware of the complexity of modern problems or of what is implied in the fundamental fact that we live by co-operation with others, and therefore tend to fall an easy prey to the propagandist and the manufacturer of party slogans. If democracy is to survive, our schools must consciously aim at the creation of understanding and effective citizens—citizens not only of the nation, but also of the world. With this end in view they should introduce all children to the main social, economic and political problems of modern life, and enable them to grasp, in outline at least, the essential features of the civilization in which they live.

The Need for Curriculum Reform

"We believe that this task of citizen-training can best be performed, not by the introduction of a new subject into an already overcrowded curriculum, but by a general reorientation of the appropriate school subjects, particularly from the age of eleven on. Stress should be laid rather upon the present than upon the past, and the existing division of the timetable into watertight compartments, labelled history, geography, English, etc., should in practice be treated merely as a matter of convenience, so that the inter-relatedness of modern problems may be made immediately apparent to the pupil.

"Many different ways of achieving this result are possible. In some schools a complete reorientation of the curriculum is being carried out. As many subjects and activities as bear on the problems of modern civilization are brought into one organized whole, sometimes called the Social Studies or Modern Humanities. In other schools a new attitude is adopted in the case of a particular subject. Realizing that the object of teaching history or geography to all children of school age is not to turn them into historians or geographers, but to make of them informed and understanding citizens, the teacher emphasises the political and cultural aspects of geography, or relates history directly to the discussion of current events, or employs the device of tracing history backwards in order to show the light that can be thrown upon the present by the past.

"Both methods of approach are valuable and may be successfully applied in different school conditions. Recognizing that much more experience is necessary before really satisfactory and appropriate programmes can be evolved either in the secondary or elementary school, we welcome all sincere experiments along these lines and hope that they may be multiplied up and down the country.

The Treatment of Controversial Issues

"While all teaching experience goes to show that a simple introduction to the problems of modern life can be given in an objective way, it is equally clear that controversial issues cannot be avoided. We believe that these issues should not be ignored or suppressed, but that opposing views should be conscientiously and fairly stated. It is, also, certain that such lessons will lead to a discussion of the issues among the children themselves. We believe that teachers should welcome, and indeed stimulate, such discussion in the classroom, since they can then see that all sides of the question are considered and can help their pupils to realize the limitations of their knowledge and lead them to become tolerant of differences of opinion."

(Signed) Sir Norman Angell, Miss Helen Corke (Author Classbooks of World History), Frederic Evans (Director of Education, Erith, Kent), B. A. Fletcher (Headmaster, Chippenham Secondary School, Wilts), Kathleen Gibberd (Author The People's Govern-
organized.

Johannesburg by the Administrator of the Transvaal, in South Africa in July, was an outstanding success.

Education and Education for Leisure, and a special Education for the Union, and Mrs. Ensor, and in Administrator for Cape Province, the Minister of Town, and a similar number in Johannesburg. The A. C. C. Hervey (Principal, Government College, Salisbury), will be given with elementary school children.

exhibition of self-expression work in schools is being will be given by Miss Maria Bird for the Headquarters

Theme and programme are already under discussion by the Executive Board.

International Conferences

The next (Seventh) World Conference of the Fellowship will be held in August, 1936, somewhere in Europe. Theme and programme are already under discussion by the Executive Board.

A Regional British Isles Conference will be held at St. Andrews, Scotland, from 13th to 23rd August, 1935. The theme of the discussions will be Social Education and Education for Leisure, and a special exhibition of self-expression work in schools is being organized.

Headquarters

A course in Rhythmic Movement for Teachers (particularly those in Infants and Junior Schools) will be given by Miss Maria Bird for the Fellowship, beginning on October 6th. Several demonstrations will be given with elementary school children.

World Fellow Teas will begin again on Friday, 28th September, at 5 p.m., when Mrs. Ensor, who has just returned from South Africa, will speak. Speakers for October will be Mrs. M. D. Skinner on ‘Danish Schools’ (5th October), Dr. Mildred Creak on ‘The London North-Western Child Guidance Clinic’ (12th October), and Frau Anna Essinger on ‘The New Herrlingen Country Home School’ (19th October).

England

Mlle Hamaide gave two lectures on ‘The Decroly Method’ on 3rd and 4th September at the Institute of Education of London University. She will be giving a week’s course in the method for the English Section of the Fellowship in February or March next, when much new material will be exhibited.

The sudden death in August of Mr. G. S. M. Ellis, secretary to the Education Committees of the National Union of Teachers, is a great blow to the Fellowship. Mr. Ellis was a valued member of the old English Section Committee, and had always been ready to give of his time and thought to aid the Section in its work. As Honorary Secretary, also, of the Fellowship’s International Commission on Examinations, he had done yeoman service, and he was actually engaged in helping to draft its first report at the time of his death. His decease is a very serious loss to the Fellowship and to the cause of the new education in England.

New Schools

The International School of Geneva celebrated its tenth anniversary this summer; for this the Student Council prepared a special edition of the School Magazine containing fifty pages and entitled Dix Ans! A special flag was also designed by one of the students and raised on Tenth Anniversary Day as a concrete symbol of the school’s aims.

A branch of the International School has recently been created at Shanghai, so that interesting exchanges may take place between the new Chinese foundation and the mother school in Switzerland. Already a group of Chinese students and teachers have arrived at the Geneva School to experience Western ways, language and culture during the coming year.

THE NURSERY SCHOOL ASSOCIATION OF GREAT BRITAIN

Nursery Schools and New Housing

In connection with the New Homes for Old Exhibition at Olympia in September, a Nursery School Section was organized by Lady Allen of Hurtwood with the close co-operation and support of the Nursery School Association of Great Britain.

The exhibit included a model of a nursery school specially designed to meet the need for such provision in connection with blocks of flats, together with a most interesting collection of large photographs showing various phases of nursery school work.
Straws in the Wind

The Association has observed with satisfaction some slight indications that the bleak wind of financial stringency is being tempered to the pre-school child! The Board of Education has recently sanctioned two new nursery schools (one at Bradford and one at Swansea), and, in reply to a question in the House, the Parliamentary Secretary to the Board was pleased to say that Local Authorities were at liberty to submit plans for new nursery schools where the need was considered to be urgent.

Meanwhile, interest in the nursery school movement is increasing and official and unofficial efforts to establish new nursery schools are beginning to bear fruit.

New Nursery Schools

At Kettering a new nursery school has been opened, with the help of a donation of £1,000 from Mr. Ronald Tree and the allocation of a site by the Education Committee.

At Dundee a voluntary nursery school which has been housed in temporary premises for fourteen years has moved into a new building.

At Balham a new voluntary nursery school is to be opened during the autumn.

At Chester rapid progress is being made towards the establishment of a new voluntary nursery school.

Film Projector

Through the generosity of three donors it has been possible to purchase a 16 mm. Kodascope by means of which it will now be possible to show films of nursery school activities for propaganda and educational purposes.

Death of Miss Winifred Mercier, M.A., O.B.E.

We deeply regret the death, on 2nd September, of Miss Winifred Mercier, Principal of Whitelands Training College. She was one of the best friends of the nursery school movement in Great Britain, and she served on the Nursery School Association Committee continuously from its inception in 1923. Even when she was unable to attend its meetings, she worked for its interests and took part in the preparation of public statements and helped to decide its policy. She was unfailingly generous in her sympathy and help. Her educational interest and understanding were all-comprehensive, so that she grasped the essentials of the whole movement, the need for it, its possibilities, its relationship to educational development as a whole, as few others have been able to do. When she spoke on the obligation of the Community towards its young children, her words showed a rare and delicate understanding of the little child that inspired a reverent response in all who listened. And thus it was that those who have been in closest touch with the movement have always been happy when she could represent them and speak for them to the wider public. Her loss will be deeply felt throughout the nursery school movement in this country.

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Details from the N.E.F., 29 TAVISTOCK SQUARE, LONDON, W.C.1
Book Reviews

The School and a Changing Civilization. W. B. Curry, Headmaster of Dartington Hall. (John Lane, 2s. 6d.)

In that minority of human beings which has opinions as opposed to mere habits, a large majority suffer from the grave defect of being what is called 'logical', i.e. of accepting on all subjects theories appealing to one set of passions and prejudices. The middle ages believed in authority and obedience, the eighteenth century in 'reason', the nineteenth in competition and individual liberty. The men who won admiration as 'thinkers' were those who applied the principle appropriate to their age in all departments, even those in which it was least likely to lead to good results. Very few have had enough intellectual self-control to perceive that every principle has its limitations, and that theories which are psychologically uniform are not likely to be true.

Mr. Curry's book on The School is in no degree subject to this defect, which is particularly prevalent among those who theorize on education, whether they be reformers or reactionaries. On every subject with which he deals, his main emphasis is on what is of greatest importance, but he admits the limitations that are called for by common-sense and practical experience. Owing to the immense inertia of educational institutions, what most needs to be said about education belongs, in its general character, not to our time, but rather to the period of Rousseau. Of the beliefs of the liberal laissez-faire period, only one has penetrated to conventional education, and that the very worst of them, namely competition—not free competition, but a carefully regulated and artificially stimulated rivalry in forms of prowess which are of little or no public utility. The modern educator has, therefore, two problems to solve which, in general politics, belong to different epochs. He has, on the one hand, to sweep away the tyranny of absurd authority, and, on the other hand, to generate, if he can, a form of social co-operation based neither on tyranny nor on rivalry with other social groups.

Galileo's conflict with the Inquisition is ancient history, but in every conventional school at the present day it is liable to be reproduced in miniature. In history, politics, and theology, there are 'correct' opinions, and pupils who discover their falsity are likely to get into trouble unless they are proficient in hypocrisy. The methods of 'moral' instruction, especially in our public schools, are antiquated, unscientific, and cruel. In imparting knowledge, it is taken for granted that every boy and girl wishes to remain ignorant, and that forcible feeding is the only possible method. In outward behaviour, the child is taught to observe a parade-ground stiffness in the presence of teachers, which makes it impossible for the adults to know anything about their pupils. All this is hopelessly wrong, and can only be cured by a realization of the importance of freedom. As Mr. Curry says: 'If the adult is in a position of educational responsibility, it is important that he should know as much as possible about the child, and this is not likely to be the case if there is a barrier of formality between them. For this reason free speech seems important as part of that general informality which is necessary if the relationship between the adult and the child is to be really fruitful'.

But while much more freedom is needed in education, it is not alone a sufficient principle. To quote Mr. Curry again: 'If all that is necessary to produce the perfect human being is to leave him alone, then why go to the expense and trouble of organizing educational institutions? The principle of liberty, while important in education, is essentially a negative principle. Liberty is important because it is the condition of the achievement of many good ends, but it is not an end in itself. Education is a constructive task. For example, the average head master thinks it worth while to see that there are facilities in his school for expert instruction in mathematics, while he does not feel the same about bridge'. The educator, in fact, has intellectual, moral, and social standards, and believes in freedom, if he is wise, as part of the method of achieving certain results. But in so far as it is not a help to these results, it must be subordinated to them. There cannot, for example, be freedom to bully or freedom to spread infectious diseases.

The purpose of schools should be to give to young men and women the desire and the capacity for useful work, without destroying instinctive happiness. At present, educational theory is inadequate as regards the desire for work which will be socially useful. Conventional educators stimulate competition, whether between individuals or between groups, and seem to consider loyalty to a small group an adequate social emotion. They thus stimulate the narrow nationalism which is endangering civilization. Many of the educators who are called 'modern', on the other hand, are so much impressed by the sacrifice of individuals to bad social ideals that they ignore almost wholly the need of social co-operation, and thus tend to produce useless anarchists. Mr. Curry avoids both these opposite errors. His opening chapter, on The School and the World, states admirably the need of consciousness of mankind combined with scepticism as regards the claims of partial pugnacious groups.

Mr. Curry has a just sense of values, a wide experience of children and a scientifically empirical attitude as regards methods. In this last respect he is especially noteworthy. It seems unlikely that any school over which he presides will become stereotyped or wedded to any one unduly 'logical' system. Kindliness and common-sense—the most important qualities in an educator—are apparent on every page.

Bertrand Russell

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Britain's Political Future. A Plea for Liberty and Leadership. Lord Allen of Hurtwood. (Longmans. 6s.)

Lord Allen of Hurtwood's new book is an expansion from his personal standpoint of the policy outlined in the 'Liberty and Democratic Leadership' manifesto recently published over 150 signatures representing many schools of political thought; but to gain its full significance it should be read in connection with the essays collected in Problems of a Socialist Government, with Mr. H. N. Brailsford's Property of Peace or with Mr. G. R. Mitchison's The First Workers' Government. For it is perhaps, even more than the statement of a policy, a statement against a policy, and that the policy of the Socialist League.

Lord Allen was formerly a Chairman of the Independent Labour Party; he was one of the signatories of the 'Socialism in Our Time' manifesto; and he still declares himself to be a Socialist. But he is a disciple of Morris rather than of Marx. He believes that democratic and non-violent methods of government by persuasion are even more essential for social well-being than the achievement of a socialized community, and he considers that an attempt to reverse these values would result in the defeat of both democracy and Socialism.

The real distinction between Marxians and Reformists, in spite of all their protests, is less a matter of principle than an expectation of behaviour. Lord Allen, Sir Norman Angell, and those who think with them, believe that society is politically fluid, amenable to reason and capable of co-operation. Sir Stafford Cripps, Mr. Brailsford and Mr. Mitchison believe it to be rigid, dominated by economic interest and doomed to conflict. The Democrats look to precedents in the London Transport Board, the B.B.C., and the Roosevelt experiment, and find in these indications that large measures of socialization can be secured by agreement. The Marxists look to precedents in Sir Otto Niemeyer's reversal of the Australian Socialist experiment, in the financial panic of August 1931, and the fate of the German Social Democratic Party, and find there the proof that 'the Socialist movement ... can do nothing whatever ... until it can control the mechanism of credit', since 'one cannot expect that property will lie passive on the operating table.'

But Lord Allen believes that if led wisely and not provoked it will thus 'lie passive.' Hence his anger with those Socialists who bring trouble by meeting it half way. It is a pity, perhaps, that so much of his argument is spent in answering the Marxists instead of outlining his constructive programme. For if they are wrong and he is right, then our hope lies in a great democratic alliance of 'Progressives,' who, in an age of national education, scientific technique and broadcast appeals, are both numerous and reasonable enough to control policy; and they, in order to succeed will need all the detailed help that their leaders can give them. Lord Allen is in this book far less detailed than either Mr. Brailsford or Mr. Mitchison.

However, he outlines a programme of action which should result both in a practical peace policy based on collective security, and a restoration of prosperity based, not upon the slogan 'down with the rich and away with private profit', but upon the appeal 'make way for a planned and scientific industrial system.' National finance would be regulated by a new Banking Corporation and Investment Board; the industries themselves would be organized under an industrial Planning Council and individual corporations such as the National Housing Corporation already advocated by Socialists and Liberals alike. The machinery of government would be simplified and accelerated by reforms of Parliamentary and administrative procedure and the Cabinet would be able to call upon the administrative capacity of men now left unemployed by the exigencies of party government.

That real democracy, achieved by non-violent methods is desirable, few doubt; what many fear is that it is impossible. Lord Allen's case for Democracy is like Mr. G. K. Chesterton's for Christianity—not that it has been tried and found wanting, but that it has been found difficult and never tried. We can only test the Marxian case by trying Lord Allen's and finding it impracticable. But what if, given courageous leadership, it did not fail? Are we to sit down under the acknowledgment that the intelligence and goodwill of twentieth century mankind were inadequate to deal with the immense incumbers of vested economic interest? At least the democratic programme seems worth trying.

Winifred Holtby

L'Eglise de L'Avenir, une et Multiple. Dr. Adolphe Ferriere. (Librairie Fischbacher. 10 fr.)

This little book, despite the apparent formalism of French thought, is a passionate appeal for religious unity. There is but one God, and though He reveals Himself differently in every heart, and though every mind grasps a portion of truth different from every other mind, yet the spirit of all is one, the spirit of Jesus, a spirit simple and universal, embracing all religions. Living religions are dynamic, not static, inclusive, not exclusive, one, because one God animates them and not because they make an identical approach to Him. The core of a universal religion is to live in the spirit of Jesus, now rising to the contemplation of God, now sinking to serving mankind humbly. The depth of a church is the depth of the spirituality of its adherents; yet the churches are cramped by their excess of institutionalism, of routine, of rigidity, of analysis, of tradition, of materialism. They cannot abandon themselves; and the masses remain aloof. Could we regain ground by a return to primitive Christianity, or by a federation of Churches? Such problems were debated at the conferences of Edinburgh, Stockholm, Lausanne, Jerusalem. Can we build an universal Christian church without distinction of confession, united but free?

Dr. Ferrière here applies two principles. First, the general law of progress in energy and power involves diversification and concentration in different organs and functions. This is true everywhere, in biology, economics, politics, in individuals, in society—
differentiation of aptitudes harmonized in union of purpose. So in religion the one service of God is in the harmonious contributions of individuals. Second, we must bear in mind the psychological differences between men. Dr. Ferriere distinguishes six main types, from the primitive, instinctive, semi-animal type up to the mystic, the saint. The types range through society, though in each of us a symptom of each type is traceable. These two principles, the law of progress, and the recognition of psychological types, are next applied in turn to Ministers and to laity, who should pool their special aptitudes; to the statement of Dogma and the organizing of worship, where the varieties of men and the law by which they advance must be remembered. How well Rome caters for the lower types, and the Salvation Army for the lowest! The few pages he devotes to religious instruction will make readers of this Journal await eagerly the book he hopes to write on this subject. Here, he says two wise things. Religious instruction is only a part of religious education, which itself is a part of religious living. And the educator must know his child-psychology. A chapter on Indian religion claims that the Oriental religions need not be outside the new catholicity he so ardently desires. More's Utopia plans something similar. Alas! Utopias arrive slowly. We have faith to believe in steady gains of painful inches. But there is no flocking to the great Supper. New lands, new oxen, new wives demand attention, and the marriage feast is not furnished with guests.

R. A. Raven

The Old School. Edited by Graham Greene. (Jonathan Cape Ltd., London, 1934. 7s. 6d.)

Mr. Greene has collected in this book essays by eighteen authors on their old schools. Public schools, elementary, grammar, convent, Lancasterian, co-educational are represented. Being personal recollections, the essays show great conflict of opinion on many matters. The age-old question of standardization versus self-expression has critics in both camps. Mr. Verschoyle, writing of Malvern, considers the public schools anxious to remove every possible opportunity for personal freedom, while Mr. Powell and Mr. Hartley, writing of Eton and Harrow, both comment on the great individual liberty they were afforded. Then Mr. Richards (Winchester) disapproves of this individualism. As mass production is the keynote of our modern world, he feels that we should train our young to it as early as possible.

The corollary of curtailment of freedom, sexual repression, is another target. Mr. Verschoyle regards the outward taboos of school life as being the best means of defeating their own ends. Miss Arnot Robertson gives a scathing account of the way sex was treated at Sherborne, and, judging from Mr. Grant Watson’s remarks, the co-educational system at Bedales does not, in its early stages, appear in any better light. Yet Miss Theodora Benson does not believe that the ‘innocence’ of her generation at Cheltenham did them any harm. ‘All of us that I have come across since’, she says, ‘have turned out as normal as can be.’ Corporal punishment is not forgotten, and medical opinion is cited to point the argument for its abolition. The games fetish is surprisingly, if obliquely, defended by Mr. Harold Nicholson, writing of Wellington, while perhaps the most arresting criticism of our present systems of education comes from Mr. William Plomer (Rugby). As he puts it: ‘After all, life is very short. Why should a man spend nearly a quarter of a century in being educated?’ The question is startling, especially when we realize that this education is almost wholly academic.

Besides giving opportunity for acute controversy, these essays are valuable as memorials simply, for most of them concern the Great War period which affected those then at school in many ways. Moreover, being written from a prejudicially personal viewpoint, sometimes amusing, sometimes harshly earnest, they are one and all extremely readable.

David G. Cleage

When the World Was Wide. Exploration and Adventure. Clifford Collinson. (George Allen & Unwin Ltd. 2s. 6d.)

Youngsters of to-day have so much to engage their attention in and out of book-land that it must be a very difficult matter for author and publisher to produce a volume that will really attract and satisfy the young and already sophisticated scholar.

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The style of the book is vivid and personal and so alive with human interest as to dispense with an out-of-date national appeal. But style apart, the volume is full of just the right sort of stuff to lead to a real delight in history; and the handy and useful chronological table at the end is just what a keen young reader will feel he wants. By the same token the young teacher might extract from Exploration and Adventure some first-rate notes of lessons.

The special cover-design in blue and white is very delightful; the maps and illustrations (where possible, contemporary portraits) are happily chosen and the print and paper up to the best pre-war standard. The publishers are to be congratulated at putting out such a perfect little book at the modest price.

Chetwynd Palmer

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NOVEMBER 1934

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Our Contributors

MARY CHADWICK, S.R.N., trained at the Psycho-analytic Institute in Berlin. Has practised as a psychoanalyst in London for the last ten years, specializing in the problems of children and adolescents with psychological difficulties. Author of Difficulties in Child Development, Adolescent Girlhood, etc.

PROFESSOR JOHN DEWEY is Emeritus Professor of Philosophy, Columbia University, New York. Born on a Vermont farm in 1859, he has always kept in touch with farm life. His services to the cause of the new education are too well known to need enumeration, and he is to-day Honorary President of the Progressive Education Association, which is affiliated to the New Education Fellowship. He is, of course, the founder of the Project Method which so widely influenced the development of progressive education in the United States.

M. GERRARD, B.A., is a graduate of Liverpool University who is keenly interested in social work and education. After her training she particularly asked to be drafted to an elementary school in a slum district. She has taught in a number of schools of this type, and her article is based on her own experience.

GEORGE H. GREEN, B.Litt., Ph.D., Lecturer in Education at University College of Wales, Aberystwyth, since 1922. He is also a director of the New Education Fellowship, and a member of the Royal Society of Teachers, of the National Union of Teachers, and of the Educational and Advisory Committee of the Welsh National Council of the League of Nations Union. Author of Psycho-analysis in the Classroom, The Mind in Action, The Terror Dream, Education for Intercultural Understanding.

BRONISLAW MALINOWSKI, Professor of Anthropology at London University and founder of the Functional School of Anthropology. His best known books are Argonauts of the Western Pacific, The Sexual Life of Savages, Crime and Custom in Savage Society, and Myth in Primitive Psychology.

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Nursery Schools in Italy

The Problem of Infant Education
BY GIUSEPPE LOMBARDO-RADICE
Translated by M. C. Glasgow
Introduction by Dr. SUSAN ISAACS

A fascinating account of the method on which two Nursery Schools in Italy are run. It should be of great interest to teachers of young children Illustrated. 6s.

Museum St., London, W.C.1
With this, the November issue, The New Era once more resumes regular monthly publication. Since its inception in 1920, we may sometimes have found it necessary to vary the form of the magazine, but we have steadfastly maintained a consistent policy. We have endeavoured to provide articles for parents, teachers and social workers concerning the education and development of the whole child, as he grows to maturity in home, school and society. In future, we shall try each month to make one special theme predominate. The October number, on The School and Social Reconstruction, dealt chiefly with the need for educationists to evolve a philosophy of education and to define clearly the purpose of their teaching. It is fitting, therefore, that this number should stress the importance of the family and the part which parents, in co-operation with teachers, must play in the child’s development; for it is in the family that the child forms his first habits and his patterns of human relationships.

Many people appear to think that the importance of the family is steadily diminishing and that most of its work will soon be taken over by the state. But the fact remains that every child is inevitably rooted in his own home; most anthropologists, sociologists and psychologists are agreed that the right type of family life is essential for every child. Yet they agree too that family life itself must inevitably change as the structure of society changes. However much we may value the family as an institution, we must not ignore these changes; rather we must understand them so that we can be sure that we seek to preserve those characteristics of family life which are essential, important not only to us as individuals but also to the state, and not merely superficial conventions which the living organism of the family has outgrown.

In his article Professor Malinowski deals with some of the dangers which threaten the family, and shows how it has survived similar attacks in the past.

One of the most fundamental changes has come about with the economic independence of woman. She has been forced into the economic struggle; she has realized her own abilities, and she is no longer content to be merely a nurse and housekeeper. She is first and foremost an individual, with individual gifts which must be developed if she is to be a satisfactory member of society. Some women’s gifts are best expressed in a conventional family life; they are home-makers by nature. But other women are not. The mere fact of being a woman does not imply an aptitude for domesticity, and those women who have a real contribution to make to the economic, social or artistic life of their country have every right to make it. The fact that more and more of them persist in doing so is not in itself a sign that family life is deteriorating or that the influence of the home is weakening. We are only now beginning to realize that home-making and parenthood are not full-time jobs; we do not yet sufficiently appreciate that they are highly skilled ones. They need training, imagination and intelligence. If, through parent education, we can equip the fathers and mothers of to-day with knowledge and understanding, we shall not need to worry about the fact that they spend less time at home than their grandparents did. Marriage and motherhood are such biological necessities to every woman that there is no fear
they will cease to be of supreme value to her, however many other interests she has or whatever profession she adopts. The short-sighted idea that women must drop their work when they marry benefits neither the state nor the home. It deprives the former of its best workers and foists unwilling and therefore inefficient housewives on the latter. In this country, for instance, the teaching profession loses some of its best members every year through marriage. Yet the married woman is sorely needed in education; her experience must inevitably give her wisdom and understanding. And how much more normal it is for children to be taught by both single and married people. In this respect France sets this country an example which we would do well to follow.

Other factors, too, tend to modify family life in this generation. The cult of athletics, inexpensive amusements, swift and easy transport, all these things decentralize home life. The members of any family scatter more easily and spend less time within the walls of their home. What then, is the enduring thing about family life? What are the vital factors? We come to realize more and more that human relationships are supremely important; and the modern parent understands that the basis of a successful marriage and a happy home is a happy relationship between husband and wife and between parents and children. The best run household, cared for unceasingly by the mother, is not necessarily the happiest home. There are many efficiently run households, which, from the child’s point of view, make exceedingly bad homes because the atmosphere is unsympathetic and there is no understanding between the partners. There are others, run far more casually, in which parents and children are happy because the relationship between them is right.

This right relationship provides a background of love and security which every child has a right to expect from his home. During his earliest years his home is his world. The understanding, the affection, he meets with there will colour his whole life and set the pattern of his relationships with other people. When he goes to school the warm and happy background of his home is still essential to him even though his education is no longer completed there.

In the old days, as Dr. Green points out in his article, the child’s complete education for life took place in the home. Everything he learned, from his mother and her weaving, baking and preserving, from his father who followed his trade in the home itself, was closely connected with everyday life and prepared him for the life he would live as a grown man. But the complexities of modern life have divided the child’s home life into two, into his school life and his home life. Frequently, there is very little connection between them. Education at home, if it is undertaken at all, tends to be merely a superficial training in manners and morals, while education at school tends to be exclusively a matter of instruction in formal academic subjects, and possibly in games.

The new education seeks to remedy this; its basic principle is, as Dr. Dewey points out, education for life through life. In all true education there must be purposeful activity. In fact, this new education is no novelty; it is simply a modern interpretation of an old concept forgotten in this industrial age which has changed the character of our home life, provided a system of mass education and profoundly affected the development of the whole man by exalting intellect at the expense of emotional and moral development.

If it be accepted that the first sixteen years of life are the years of general education and that purely academic training comes later for those who are fitted for it, then the school curriculum must be based on those subjects which are necessary for a full life. Reading, writing, arithmetic, general science, history, geography, the mother tongue, arts and crafts, must be taught not as isolated abstract subjects, but through activities such as projects and through social studies which have a definite relationship to the actual life of the child. What is the use of teaching a child who is hungry and dirty and
ill-clad, abstract problems of arithmetic or textbook geography? Why, when we know the value of fresh air and preach it to our children, do we continue to house them in monstrous ill-ventilated barracks? Why do we provide children from the poorest homes with small asphalt playgrounds while children from better homes have grounds and playing fields as a matter of course? It is not for lack of money; there is always money enough for any scheme considered to be of national importance by those who influence state policy; there is always money for armaments and investigations into poison gas. In his book, *My England*, Mr. Lansbury foresees a time when every child will have the right food for growth and when our obsolete and ugly schools will be replaced by simple, hygienic and artistic buildings set in their own grounds. In the meantime progressive teachers can make headway in spite of poor equipment if they will accept the principle that education is for life and that they are concerned not only with the child’s intellect but with his whole personal life, at home and at school.

The Family and the School

There has been far too little co-operation between the parent and the teacher in the past; we are only just beginning to realize how vital it is that they should work together in their common task of educating the child. If the family is to retain all its vital functions and the school is to prepare the child for life, then obviously the parent must understand what the school is doing and the teacher must co-operate with the home. This aspect of a teacher’s work has been dealt with most effectively by Mrs. Gerrard in her article on teaching in an elementary school. Any teacher who cares about the children as individuals soon comes to recognize the imprint of the home on the child. She will always be able to tell the institution child, the adopted child, the only child, the child with brothers and sisters of a superior mentality, and the child from the broken home.

The school to-day has not only to complement the work of the home on the physical side by providing medical care, extra food and milk, etc., and on the intellectual side by training the child’s mind; it must also supplement it on the psychological side. This means that the teacher must know and understand each child. Though this is difficult with large classes, yet it can be, and is, done by the teacher who really cares about the task of educating the whole child, and not merely about getting him up to examination standards. The true teacher is an artist, painting a picture in human materials, and no labour is too great for him. Creative work of this kind is vital and dynamic and therefore less exhausting than purely mechanical work.

The Problem

The normal family consists of father, mother, brothers and sisters. The lack of any of these is apt to produce certain problems. If the happy relationship between parents—so vital to the home—is not present, the child’s whole outlook is inevitably affected. To the young child, his parents are the most important creatures in the universe; when they are at odds with one another, his security itself is threatened. Friction between them communicates itself at once to the child, and it is useless to try and conceal it with superficial politeness. It is impossible to discuss here all the problems of parental disagreements and relationships. Controversy will always rage round the question of whether parents should remain together for the sake of the child although they are out of sympathy with one another, or whether it is better for them to part. Probably, from the child’s point of view, this depends entirely on the kind of relationship they can build up if they remain together. Obviously, if they can reach some kind of agreement on basic points, are united in their love for the child and in their ideas on upbringing and can live in reasonable if not ideal happiness, then it is better for them to part. Probably, from the child’s point of view, this depends entirely on the kind of relationship they can build up if they remain together. Obviously, if they can reach some kind of agreement on basic points, are united in their love for the child and in their ideas on upbringing and can live in reasonable if not ideal happiness, then it is better for the child that they should do so. No home should be broken lightly. But if the disagreement is so fundamental that it can only be thinly patched and will keep on breaking out again, then it is perhaps better for the child that they should separate. One point is certainly clear; both situations make difficulties for the child, and each parent has his or her part to play in making them more bearable. Nothing can be gained
from concealment; unanswered questions can become a nightmare to any child; the sudden departure of a father or a mother must at best shake his faith in his world and deprive him of companionship and sympathy which is his due. Understanding can help him to readjust himself to new conditions, but tragically enough, this understanding cannot always be given by either parent. They are too close to their own sorrows, too bitter about their own and each other’s failure.

This is the point at which the teacher may be able to help. Just as grown-ups untangle their personal problems from discussing them, either with friends or, in extreme cases, with psychologists, so the child who has a friend in his teacher can sometimes be helped to see his home life in a truer perspective and have his confidence and peace of mind restored. Even when the tragedy is too remote for the teacher to be able to help directly, still these over-mature and often disillusioned children from broken homes need special handling. So much can be done at school to make up for what the child lacks at home. This kind of intervention is obviously more difficult at a day school than it is at a boarding school, where the teacher has more opportunities for getting to know each pupil. But the understanding teacher can do much, even in a day school, provided he is to a certain extent in the parents’ confidence and works in co-operation with them.

Though it falls to the lot of the teacher to straighten out muddles created in the child’s home life, it is equally often necessary for the parent to help the child to face difficulties in school. It sometimes happens that the teacher fails to understand the child’s character. Aggressiveness due really to extreme diffidence may be treated with the severity due to bumptiousness. The child may be over-anxious and do badly at his work and be scolded for carelessness, whereas he is really being over-careful. Then it is for the parents to set matters right. Sympathy and perspicacity will often enable them to get at the root of the trouble, and if they would co-operate with the school by explaining matters, many of the needless troubles which children have to face would be avoided.

What then do we ask from the family and the school? First that they should both realize that they are partners in their task of bringing up the child, second that they should educate the child for life, third that each should see the child as a whole, as an integrated personality, with roots in his family and an independent personal life outside of it. It is for the family to give the child that particular feeling of affection, that confidence in himself, which is the vital contribution which the home must make to the lives of the children it shelters. From the school, we ask far more than an academic education. The school must first continue the work of the home, then it must seek to develop the child’s gifts in a way which is no longer possible within the home, then it must give the children knowledge which will enable them to live useful, full and happy lives as satisfactory citizens, and lastly it must help to root them in their community and give them a sense of responsibility to others. Too little is done to-day to make children aware of the social and economic problems of our age. Such burning questions as the housing problem and unemployment must be discussed. And if the school is to give children a preparation for life, it must also prepare them for parenthood and marriage. It is taken for granted that these subjects must be left to the home, but comparatively few homes even to-day can give children any very adequate preparation for either. Then, too, the school must enable children to appreciate leisure and to employ it wisely; it must give them a love of reading and develop their creative gifts: it must also fit them for a career and help them to discover what kind of work they can do best. Finally, it must help them to find for themselves a worthy philosophy of life. The school cannot do all these things by itself alone; working together, enlightened parents and teachers can accomplish them all. Then, indeed, we shall cease to have problem children and neurotic adults; for we shall have an education which will produce men and women capable of living a full and satisfying life, capable of working for their fellows, capable of bringing in the new age for which we all work and hope.
THE family, that is the group consisting of mother, father and children, has been and to a large extent still remains, the main educational agency of mankind. This is the verdict of sound modern anthropology, this is the knowledge derived from history and dictated by common sense.

Ancestor worship, the command to 'honour thy father and thy mother', the cult of a God the Father and of a Mother Goddess, have been the corner stones of most human religions. The modern scientific student of genetics is inclined to judge the quality of the offspring by that of the parents. The contemporary sociologist counts cultural inheritance and home influences as the dominant factors in the shaping of human character. Psycho-analysis with its stress on the 'domestic complex', that is the memories derived from the early contact between the child and its parents, and Behaviourism, with its assertion that 'conditioning' matters more than endowment, also imply that the influences of the domestic setting must be dominant in education.

The Modern Onslaught on the Family

At present, however, the family is being seriously threatened and its future searchingly questioned. 'The family is going to disappear within the next fifty years'; 'sex is now used for recreation and not for procreation'; 'family life is obviously a study in lunacy'—such statements could be multiplied from modern sociological and pseudo-psychological literature. The type of reproduction and education outlined by Aldous Huxley, as a satire, in his *Brave New World*, has been seriously propounded by some writers whose authority is not altogether negligible.

* A fuller documentation of the anthropological views here summarised will be found in the articles s.v. 'Marriage', 'Kinship', and 'Social Anthropology' in the latest edition of the *Encyclopaedia Britannica*; the article s.v. 'Culture' in the *Encyclopaedia of Social Sciences* (New York); also in the article 'Parenthood—The Basis of Social Structure' in *The New Generation*, London, Allen & Unwin.

There is no doubt that some of the dominant intellectual trends of our day have exercised a corroding influence on the stability of marriage and the family, notably, Psycho-Analysis, Behaviourism, some advocacies of 'sex communism' and of the extreme hedonistic point of view. Some overt legislative attacks against marriage and the family, mainly in Soviet Russia, seem also seriously to threaten the future of the domestic institutions. The most important, however, are those influences which go beyond academic attack or clumsy legislative encroachment, which are insidious, inevitable, and pervading at the same time. I mean such facts as the technique of contraception, the growing financial, hence also legal and moral, independence of woman, and the fact that the household is rapidly ceasing to be a profitable economic enterprise, or even a convenient place for the joint existence of the family.

The modern woman does not need the cloak of marriage in order to satisfy her sexual life; modern man does not need to resort to prostitution nor clandestine intrigue. Each can earn his or her own living, can play a rôle in public and political life, can move about independently and need not marry when they want occasionally to mate. Should there be even a child, it is possible with the modern ease in transport and anonymous reappearance somewhere else, to slip away and eventually to hand the child over to be brought up in some sort of communal nursery, kindergarten and then school. With most incentives gone, with the advantages of marriage fading away and the hardships of home life increasing, one often wonders not that marriage is affected, but that people still marry and bring forth families, that after divorce they remarry—in short that humanity still reproduces mainly in the old-fashioned manner.

Anthropology and the Family

It is at this point that the modern anthropologist who studies the past of human history in order to obtain an insight into the future,
can offer an explanation as well as some indications of development.

The anthropologist himself, in fact, has been confused in his theoretical work by a number of factors such as primitive mother-right, the sexual freedom of savages, the importance of the clan, tribe or horde and its encroachment on the family—factors which closely resemble the modern snags of domestic life. There was a time when anthropology despaired of the existence of the family in the past, even as sociologists nowadays despair of the family in the future. We had the famous theories of primitive promiscuity, of group marriage, of early matriarchy, and of the gradual and painful evolution towards monogamy and family.

Sexual Morality, Past and Present

These views which still have a wide currency in popular and pseudo-scientific literature have been now definitely discarded by professional anthropologists. The change has come through a better knowledge of facts. Reports about the existence of so-called group marriage in Central Australia, in Siberia, or New Guinea, have been recently found to be incorrect. With the fuller knowledge of facts and the changing outlook we have arrived also at more precise concepts and different methods of approach. We no longer glibly speak about 'sexual communism,' 'group marriage,' 'primitive matriarchy' and the 'clan as a reproductive unit.' The modern anthropologist is no longer busy dissecting the various aspects of the family and marriage into 'promiscuity,' 'marriage by purchase,' 'patriarchy' and so on, and then projecting such self-contained entities on an evolutionary line. The competent observer has discovered that 'father-right' and 'mother-right' exist side by side, that marriage is compatible with pre-nuptial laxity, that the clan and family instead of excluding, complement each other. In fact, through all variations the most stable units which are found everywhere are the family and individual marriage.

An entirely different problem therefore has emerged for a modern anthropology. It is no longer the question of deciding whether the family or individual marriage has superceded or followed the clan, whether early representatives of the human species were entirely promiscuous or highly virtuous, whether mother-right precedes patriarchy or vice versa. The problem for the modern anthropologists is rather to show the relation of these different social troops, agencies and institutions.

Let us take as an example the question of sexual morality. The distinction embodied in the modern slogan 'sex for recreation and not for procreation' has been drawn by most savages—drawn, enforced and institutionalized. If we were to divide the lowest savages into Primitive Puritans and Early Hedonists, the former—the Veddahs of Ceylon, the Orang Kubu of Sumatra, the Yahgan of Tierra del Fuego—look at matters in a way on which from the 'moral' point of view even Queen Victoria herself could not improve. Everyone of them regards with horror any lapse of an unmarried girl, with disfavour any libertinage on the part of an unmarried boy, and they are very much shocked by the very mention of adultery.

Sex and Parenthood

On the other hand, the central Australian as well as the typical Bantu and Polynesian, the Papuan or the Sudanese, takes a different view. Free love making is allowed, at times there are restrictions and definitions on the type of erotic satisfaction which can be found in the company of the other sex. But one rule is always precise and often extremely stringent: there must be no pregnancy without marriage. The punishment for transgression is sometimes severe to the extent of public and cruel execution of both culprits. Among the Daggga—who belong to the Bantu tribes practising female circumcision—I was told blood-curdling tales of how such executions were actually carried out in the olden days.

In most tribes, however, some speedy and easy remedy is found: immediate marriage is enforced after pregnancy has taken place; or a compensation is demanded from the man, which makes the girl more desirable; or in some cases where children are the main asset of marriage, the man himself marries the girl of his own free will as a reward rather than as a penalty.

This example shows that it is futile to discuss
pre-nuptial licence without reference to the institution of marriage. A more detailed analysis—for which some material will be found in the articles quoted—shows that marriage in all human societies is the licencing of parenthood rather than of sexual intercourse. Marriage affects the course of sexual life very profoundly. In fact, pre-nuptial intercourse almost everywhere is not an end in itself but rather a form of trial union, a method of courtship, a means of experimenting in the possibilities of marriage.

**Sex and Marriage**

If this view be correct, we can say that even a considerable relaxation in sexual conduct does not need to affect profoundly the institution of marriage and the family. It also proves that the key to the problem does not lie in the study of the sexual impulse detached from its wider context of personal relations and of parenthood. We can say that the desire on the part of the woman to have children with the right man, and the realization by the male that only as a father can he reach full tribal status and influence, lead to marriage and the establishment of a household.

Thus, even as it is futile to study the sexual impulse without understanding its psychological context of personal relations between man and woman, so also it will always remain irrelevant to study marriage as a personal relationship without investigating its rôle in tribal life. Without personifying society we can say that everywhere tribal tradition puts a premium on effective and successful parenthood. In societies like those of Africa where the core of religion is ancestor-worship, a man who dies without male issue passes into oblivion, while during his life he remains without real influence in the tribe. Female issue is equally desirable in societies where the bride price is one of the fundamental legal institutions. The whole legal and economic constitution of a typical Bantu tribe, of a Polynesian or Malayan society, is associated with the principle that it is economically advantageous, morally desirable and socially honourable for a man to be the father of many children and for the woman to be a mother of both sons and daughters.

The strength of some more highly developed communities, notably the Chinese, the Semites, and the Indians, is associated with the same social and moral forces.

**The Economic Attack on the Family**

Turning now to another aspect, there is no doubt that at present many economic forces work against the family, and that the State, even in such of its forms as profess to favour marriage and the family, works against it. This is very different from what obtains under more primitive conditions. Take a typical Bantu: he marries, because he wants children, but also largely because without a wife he cannot set up a household and cannot cultivate his fields. For this is a joint man's and woman's work. His wife will provide for him his domestic comforts. She will cultivate his gardens and prepare his food. The children also, even while they are being educated in tribal matters, work with him and work for him. In his old age he entirely depends on his children who by tribal law and morality have to support him.

If instead of taking an African Bantu, we were to pass to any other native community or dwell on the old order of things in China, we would find exactly the same conditions. And let me add at once, the study of primitive religion, customary law, and early morality would show that all the forces combine to make wealth in children, that is a strong family and a large family, the greatest asset to man and woman.

**Marriage and Motherhood—Asset or Liability?**

Here modern conditions are certainly more alarming than those discussed in connection with the sexual aspect. In the large towns and among industrial workers to-day, the self-contained household is no more an inevitable necessity. It is even less so among the middle class. In the modern life of big cities, what with the difficulty of domestic service, the ease of obtaining food and help in service flats, the life of a household seems to be disintegrating. The family is rapidly ceasing to be a group based on joint production, or even on joint consumption of goods. The economic advantages for a man or women to marry
are negligible compared with the inducements of a Bantu or Oceanic or a Chinese peasant.

The crushing death duties now imposed by most States, above all in Great Britain, have already disintegrated the economic continuity of lineage. Modern taxation, with the insignificant advantages given to large families, works essentially against and not for the family. In addressing educationalists one can point out a characteristic detail: the fact that married women in many countries are deprived of any chance of obtaining teaching posts in State schools. Marriage here as in many professions becomes a liability, and motherhood a stumbling block to a woman's career. A full analysis would show that not only do modern economic and technical conditions work against the family, but that the state instead of assisting the family very often militates against it.

The Family—Its Power to Survive—

But here again an anthropological analysis would prove that some such disintegrating forces of an economic nature have at an earlier stage worked at the expense of the family, yet without destroying it. The family has survived the economic onslaught and extortion of greedy chiefs, as well as the excessive forms of taxation in the highly organized little states of Africa or Oceania. It has survived the disintegrating influences of forced labour and slavery. It is compatible with individual exploitation of the soil and with communal land tenure.

Again, the clan, as I have shown in the article on Kinship above mentioned, is not something which overrides the family but it is a group which can be shown to grow out of the family—to be a by-product of family life.

Thus, whichever of the modern disintegrating forces be considered, it is possible to show that the family has in the past withstood and overcome their onslaught. Individual marriage and the family have somehow readjusted and survived the attacks of antagonistic political, economic, legal and hedonistic influences. The group consisting of mother, father and children emerges always as a social unit in which the biological process of procreation is carried out under legal safeguards with a substantial economic foundation, surrounded by moral and religious values. Anthropology proves that the physiological forces of maternal love, the attachment between husband and wife and the interest of the father in his wife’s offspring cannot be readily thrown away and superseded by the impersonal concern of the state, by the lukewarm enthusiasm of charity or by the cold interest of scientific planning.

This ‘message of comfort’ does not mean that we should be satisfied with a supine acquiescence in the operation of modern disintegrating forces. A policy of vigilance, indeed of active and constructive reform, is necessary. The exclusive concentration on the sexual side of marriage which we find prevalent in modern sociological literature is, I think, one-sided to say the least. The most important need is to realize that in the future we must create economic, legal and social conditions with real advantages to those who enter marriage and produce large families.

The study of the family teaches us that a civilization which would destroy the family would also destroy the continuity of tradition, the interest in building up economic enterprise, and with this also the integrity of human character.

THE NEW EDUCATION FELLOWSHIP

29 TAVISTOCK SQUARE, LONDON, W.C.1.

An AT-HOME for N.E.F. members and friends will be held at the Royal Academy of Music at 8.15 p.m., on Saturday, 1st December.

Dr. J. H. OLDHAM will speak on THE NEW THREAT TO THE CHILD THROUGHOUT THE WORLD. There will be other speakers.

Non-members desiring invitations should apply to the N.E.F. as above.
Co-operation Between Home and School
GEORGE H. GREEN

HOWEVER greatly social changes may have affected the character of family life during the last century, the family remains the fundamental social and cultural unit. Any sort of change which impairs the cultural integrity of family life appears to be followed inevitably by the development of institutions of a compensatory character, originating perhaps in the perception (mainly unwitting) that the change has deprived the child of something which is essential to his cultural development.

The Home, past and present
Accounts of the family life of the craftsman of two or three centuries ago indicate to us the relative completeness of the life lived within the home. The father carried on, either in one of the rooms of the house or in a small workshop adjoining it, a craft which was essential to the life of the small community of which he was a member. He actually worked, with his apprentices, within the home. Here, too, he met his customers, discussing with them their needs and the events of the day, exchanging with them local gossip and the news of the wider world. In the home, too, the mother brought up her children and worked at the numerous crafts which in those days went to make up housekeeping.* Thus, under a single roof, every single element that went to the making of the ‘culture’ or ‘way of life’ of a group was to be found functioning vitally as part of an organic whole. Children, developing in such a home through living in it and participating in its activities, were being completely educated, in the sense that they were being prepared for life.

These things have changed. The craftsman father no longer works in the home or an extension of it, but in a factory, from which he returns to the restaurant-dormitory which has taken the place of his home. His children know little or nothing of the nature of his work or its technique, and are debarred from being educated for life through watching him work or by help-

*See, for example, Gilbert White’s description of the making of rushlights in the Selborne homes (‘Natural History and Antiquities of Selborne’).
Learning through Doing—Carpentry at a progressive school in Holland Park, London

growing up in the industrial areas. The workmen in these new factories were called teachers; and supervised by gaugers (known as inspectors) whose duty was to test annually, by the application of 'standards', the work done in the course of the year upon the raw material entering the factory—the child. Since the school was developed at the same time as the cotton and woollen factories, the iron foundries and the rolling mills, and very often controlled by the same directors, it was not unnatural that education should have been conceived as something like spinning, weaving, casting or rolling. The more imaginatively daring of the educators did indeed admit that to spin or weave or roll it was necessary for the workman to 'know' his material—and thus the foundations of child study and child psychology were laid—but they did not realize that the whole analogy upon which they were building up their theory of education was a false one. Just as long as the factory parallel led them to think of the child as something to be 'processed,' it did not matter greatly whether they called the process education or something else; except that the use of dignified words blinded them to the fact that they were really thinking of the child as thread or yarn or pig-iron or steel ingot.

This account of the development of the people's schools in England may make it appear that the school was deliberately organized to compensate for the changing character of the home. This is hardly true. If something of the kind urged statesmen to the creation of schools, it was as an unwitting motive; the obvious and admitted one being the realization that the workers in the factories needed elementary schooling in order to make them more efficient and profitable. And thus, in preparing the child for labour in the factory, the school was, in measure, preparing the child for the life he was to lead in the future. 'In measure'—because the school saw life only in terms of a wage-rewarded job: since life is more, so much more, the school was defective.

New Learning for a New World

Man does not live by bread alone, or even by wages. Life in the family home of the older type was very much more than a mere preparation for carrying on, when the time came, the manual craft of the father. It was a matter of learning to live with people, to bear and forbear, to insist and to yield, to lead and to follow, to acquire the knowledge which made all the difference between wisdom and ignorance in a particular social setting, to accustom oneself to loyalties, to accept beliefs. Things learned in school, apart from the social context which alone gave them significance, were often little more than mere tricks. One learned to read without learning what to read. One learned to write apart from any urgent need of expression. One learned to manipulate numbers which signified nothing whatever.

In our own day the conception of education in terms of culture, of 'way of life', is widely accepted; and leading educators in all countries have written upon education or formulated definitions in ways which show fundamental agreement in this respect. Nunn sees education
in terms of the life of an organism, integrated for living through living. Decroly’s ‘globalisation’ technique was an expression of acceptance of the integral unity of cultural life. Dewey and Rugg differ, not in essentials, but only as two skilled observers viewing the life of their own society may be expected to differ. The leaders of education insist that education is to be preparation for living, considered as a whole, and not for single aspects of living.

What makes difficult the putting of these theories into practice is the fact that cultures are no longer static. In our own day we have seen an immense acceleration of invention and discovery. We need mention only the internal combustion engine (with its corollaries the automobile and the aeroplane), the telephone, the cinematograph, the wireless, to emphasize the fact that the body of habits and attitudes which constitutes the way of life of a group is changing rapidly—too rapidly, in fact, for many people to adjust themselves satisfactorily. Not only are cultures changing, but the internationalization of inventions and finance and the increased facility of travel are breaking down the national cultural differences at the same time that the national cultures themselves are changing beyond recognition.

Some regret this, but it is vain to attempt to restore the past. Few restorations achieve anything closer to life than an exhibition of waxworks. And consequently, though we recognize the immense value of the home of the past in educating the child for life with an efficiency far greater than the large school can hope to attain, we shall not on this account weep for the passing of the craftsman’s home, nor demand its reinstatement and legal safeguarding. We shall rather consider exactly how and why the home was able to educate. We shall consider what influences were operative in the home of the past, though perhaps absent from both the home and the school of to-day. And, having found them, we shall have to go on to discover
means of linking up the school with all the places where life is lived, of co-operating with the work and thought, the art and belief, the aspiration and the hope of our time, of removing the obstacles which make it so difficult for the child of to-day to see life whole.

Training for Life
Various measures have been suggested for attaining these ends. Different types of ‘home schools’ have been planned. The weakness here is that the school merely imitates a home which has long lost its cultural integrity. Rugg has emphasized the importance of social studies, so planned and carried out that the child lives as fully as possible the activities of the social group to which he belongs; afterwards studying in detail what he knows through experience and observation. Dewey, too, has stressed the need of living fully through the various kinds of living which offer attractions to the child—so that he experiences something of the ardours as well as the delights of this or that way of living, not merely playing with the sugared froth of life’s beverage, but drinking it deeply. This, I take to be an essential element in Dewey’s training for society. Kilpatrick and others would so shape the school curriculum that it is presented as a series of experiences to be lived through; experiences in living through which living is learned.

The bulk of the best modern theory emphasizes the individuality of the child, considering him as an immature member of a social group which is to be trained by life itself for complete adult participation in the cultural life of the group. The attenuated home and the incomplete school provide him with two different environments, in each of which he develops, but in different ways. In the home, the child’s development may supplement his development in school, or may thwart it. The influence of the school may be so deflected by the home that it fails of its aim. Sometimes it happens that the child acquires two opposed sets of attitudes, two codes of behaviour—even two languages. What is right at school is wrong at home, and vice versa. The parent is sometimes irritated by the teacher’s adverse criticism of matters which seemed, in the home, correct and proper. The teacher, too, resents the mention of what ‘Father said’ as a contradiction of what is taught in the school.

The School and the Home
The expression in practice, then, of cultural integrity as an essential of education necessitates wide co-operation. Without experience of life at first-hand all the words which are used to describe life and living are mere symbols divorced from reality. In some way or other we have to link the school with the manifold expressions of the life of our time as really as the home of the past unified in a single institution all the diverse elements of a rich culture. The life of our day must be lived in the school, integrated in the school, and known through experience to the pupils. It is, however, one thing to say that wide and varied co-operation is essential, and another to devise the form and machinery of such cooperation. Many people, at this stage, shrink back and say the task is hopeless; forgetting that a good deal of pioneer work has already been done in some directions. Clearly something can be done to bring the school and home together so that the disharmony between these two environments may disappear, and that one may continue or supplement the work of the other. Parent-teacher, or home-school, co-operation may not be the most vital element in the new programme. It is, however, an essential part.
The Need for a Philosophy of Education

JOHN DEWEY

The phrase 'progressive education' is one, if not of protest, at least of contrast, of contrast with an education which was predominantly static in subject-matter, authoritarian in methods, and mainly passive and receptive from the side of the young. But the philosophy of education must go beyond any idea of education that is formed by way of contrast, reaction and protest. For it is an attempt to discover what education is and how it takes place. Only when we identify education with schooling does it seem to be a simple thing to tell what education actually is, and yet a clear idea of what it is gives us our only criterion for judging and directing what goes on in schools. It is sometimes supposed that it is the business of the philosophy of education to tell what education should be. But the only way of deciding what education should be, at least, the only way which does not lead us into the clouds, is discovery of what actually takes place when education really occurs. And before we can formulate a philosophy of education we must know how human nature is constituted in the concrete; we must know about the working of actual social forces; we must know about the operations through which basic raw materials are modified into something of greater value. The need for a philosophy of education is thus fundamentally the need for finding out what education really is. We have to take those cases in which we find there is a real development of desirable powers, and then find out how this development took place. Then we can project what has taken place in these instances as a guide for directing our other efforts. The need for this discovery and this projection is the need for a philosophy of education.

What is Education?

What then is education when we find actual satisfactory specimens of it in existence? In the first place, it is a process of development, of growth. And it is the process and not merely
the result that is important. A truly healthy person is not something fixed and completed. He is a person whose processes and activities go on in such a way that he will continue to be healthy. Similarly, an educated person is the person who has the power to go on and get more education. Just what do we mean by growth, by development? Some of the early educational philosophers, like Rousseau and his followers, made much use of the analogy of the development of a seed into the full-grown plant. They used this analogy to draw the conclusion that in human beings there are latent capacities which, if they are only left to themselves, will ultimately flower and bear fruit. So they framed the notion of natural development as opposed to a directed growth which they regarded as artificial.

But in the first place the growth of a seed is limited as compared with that of a human being; its future is largely prescribed by its antecedent nature. It has not got the capacities for growth in different directions toward different outcomes that are characteristic of the more flexible and richly endowed human young. The latter is also, if you please, a seed, a collection of germinal powers, but he may become a sturdy oak, a willow that bends with every wind, a thorny cactus or a poisonous weed.

This fact suggests a second fallacy. Even the seed of a plant does not grow simply of itself. It must have light, air and moisture in order to grow. Its development is after all controlled by conditions and forces that are outside of it. Native inherent forces must interact with those of its surroundings if there is to be life and development. In fact, development, even with a plant, is a matter of the kind of interaction that goes on between itself and the conditions and forces that form its environment. A stunted oak, a stalk of maize that bears few ears with only a few scattered grains, exhibit so-called natural development as truly as does the noble tree with expanding branches or the ear of maize that wins the prize at an exhibition. The difference in result may in part be due to native stock, but it is also due in part to what the environment has provided. And even the finest native stock would come to an untimely end or result in a miserable product if its own energies could not interact with favourable conditions of light, moisture, air, etc.

Since there are two factors involved in the existence of any interaction, the idea and ideal of education must take account of both. Traditional school methods and subject-matter failed to take into account the diversity of capacities and needs that exists in different human beings. It virtually assumed that, for purposes of education at least, all human beings are as much alike as peas in a pod, and it therefore provided a uniform curriculum for all.

Initiative—from the Teacher or the Taught?

In the second place, it failed to recognize that the initiative in growth comes from the needs and powers of the pupil. The first step in the interaction that results in growth comes from the reaching out of the tentacles of the individual, from an effort, at first blind, to procure the materials that his potentialities demand in order that they may come into action and find satisfaction. As with the body, hunger and power of taking and assimilating nourishment, are the first necessities. Without them, the food that is theoretically most nutritious is offered in vain. Nothing would be more extraordinary if we had a proper system of education than the assumption, now so commonly made, that the mind of the individual is naturally averse to learning, and has to be either browbeaten or coaxed into action. Every mind, even of the youngest, is naturally or inherently seeking for those modes of active operation that are within the limits of its capacities—precisely as the body of the baby is constantly active as long as the infant is awake. The problem, a difficult and delicate one, is to discover what tendencies are especially seeking expression at a particular time and just what materials and methods will serve to evoke and direct a truly educative development.

The practical counterpart of the failure of traditional education to see that the initiative in learning and growth is with the individual learner lay in the method of imposition from the side of the teacher and reception, absorption, from the side of the pupil. Unwillingness to learn naturally follows when there is failure to take into account tendencies that are urgent in the existing make-up of an individual. All
sorts of external devices then have to be resorted to in order to achieve absorption and retention of imposed subject-matter and skills. This method of teaching may be compared to inscribing records upon a passive phonographic disc to result in giving back what has been inscribed when the proper button is pressed in recitation or examination.

It is impossible, of course, for any teacher not to observe that there are real differences among pupils. But because these differences are not carried back to concrete differences in individuality, to differences in needs, in desires, in direction of native interest, they are too often generalized by being summed up under two main heads. Some pupils are just naturally bright while others are dull and stupid! Some are docile and obedient and others are unruly and troublesome! Conformity then becomes the criterion by which the pupil is judged in spite of the fact that initiative, originality and independence are precious qualities in life.

The Teacher—Artist or Mechanic?

While the raw material and the starting-point of growth are found in native capacities, the environing conditions which it is the duty of the educator to furnish are the indispensable means by which intrinsic possibilities are developed. Native capacities are the beginning, the starting-point. They are not the end and they do not of themselves decide the end. A gardener, a worker of metals, will not get far in his work if he does not observe and pay attention to the properties of the material he deals with. But if he permits these properties to dictate what he does, he will not get anywhere. Development will be arrested, not promoted. He must bring to his consideration of what he finds an ideal of possibilities not realized. This idea and ideal must be in line with the constitution of the raw material; it must not do violence to them; it must express their possibilities. But, nevertheless, it cannot be extracted from any study of them as they now exist. It must come from seeing them imaginatively, reflectively; and hence it must come from a source other than what is already at hand.

In the case of the educator the demand for imaginative insight into possibilities is greater. The gardener and worker in metals may take as their measure of the end to be accomplished the things that have already been done with plants and ores, although if they are original or inventive they will introduce some variation. But human individuals vary in their structure and possibilities as plants and metals do not. While the educator must use results that have already been accomplished he cannot, if he is truly an educator, make them his final and complete standard. Like the artist he has the problem of creating something that is not the exact duplicate of anything that has been wrought and achieved previously.

In any case, development, growth, involve change, modification, and modification in definite directions. It is quite possible for a teacher, under the supposed sanction of the idea of cultivating individuality, to fixate a pupil more or less at his existing level. Respect for individuality is primarily intellectual. It signifies studying the individual to see what is there to work with. Having this sympathetic understanding, the practical work then begins, for the practical work is one of modification, of changing, of reconstruction continued without end. The change must at least be towards more effective techniques, towards greater self-reliance, towards a more thoughtful and inquiring disposition, one more capable of persistent effort in meeting obstacles.

The weakness of some schools and teachers that would like to claim the name of progressive is that in reaction from the traditional method of external and authoritative imposition, they stop short with the recognition of the importance of giving free scope to native capacities and interests. They do not, in the first place, examine closely enough and long enough to find out what these actually may be. In the second place, they are inclined to take the individual traits that are showing themselves as finalities, instead of possibilities which by suitable direction can be transformed into something of greater significance, value and effectiveness. There is still current in many quarters the idea that evolution and development are simply matters of unfolding from within and that the unfolding will take place almost automatically if hands are kept off.

This point of view is natural as a reaction from the manifest evils of external imposition.
But there is an alternative; and this alternative is not just a middle course or compromise between the two procedures. It is something radically different from either. Existing likes and powers are to be treated as possibilities, as starting-points, that are absolutely necessary necessary for any healthy development. But development involves a point towards which as well as one from which; it involves constant movement in a given direction. Then when the point that is for the time being the goal and end is reached, it is in its turn but the starting-point of further reconstruction. The great problems of the adult who has to deal with the young is to see, and to feel deeply as well as merely to see intellectually, the forces that are moving in the young; but it is to see them as possibilities, as signs and promises; to interpret them, in short, in the light of what they may come to be. Nor does the task end there. It is bound up with the further problem of judging and devising the conditions, the materials, both physical, such as tools of work, and moral and social, which will, once more, so interact with existing powers and preferences as to bring about transformation in the desired direction.

The Need for Imaginative Vision

The essential weakness of the old and traditional education was not just that it emphasized the necessity for provision of definite subject-matter and activities. These things are necessities for anything that can rightly be called education. The weakness and evil was that the imagination of educators did not go beyond provision of a fixed and rigid environment of subject-matter, one drawn moreover from sources altogether too remote from the experiences of the pupil. What is needed in the new education is more attention, not less, to subject-matter and to progress in technique. But when I say more, I do not mean more in quantity of the same old kind. I mean an imaginative vision which sees that no prescribed and ready-made scheme can possibly determine the exact subject-matter that will best promote the educative growth of every individual young person; that every new individual sets a new problem; that he calls for at least a somewhat different emphasis in subject-matter presented. There is nothing more blindly obtuse than the convention which supposes that the matter actually contained in text-books of arithmetic, history, geography, etc., is just what will further the educational development of all children.

But withdrawal from the hard and fast and narrow contents of the old curriculum is only the negative side of the matter. If we do not go on and go far in the positive direction of providing a body of subject-matter much richer, more varied and flexible, and also in truth more definite, judged in terms of the experience of those being educated, than traditional education supplied, we shall tend to leave an educational vacuum in which anything may happen. Complete isolation is impossible in nature. The young live in some environment whether we intend it or not, and this environment is constantly interacting with what children and youth bring to it, and the result is the shaping of their interests, minds and character—either educatively or mis-educatively. If the professed educator abdicates his responsibility for judging and selecting the kind of environment that his best understanding leads him to think will be conducive to growth, then the young are left at the mercy of all the unorganized and casual forces of the modern social environment that inevitably play upon them as long as they live. In the educative environment the knowledge, judgment and experience of the teacher is a greater, not a smaller factor, than it is in the traditional school. The difference is that the teacher operates not as a magistrate set on high and marked by arbitrary authority but as a friendly co-partner and guide in a common enterprise.

Development, however is a continuous process, and continuity signifies consecutiveness of action. Here was the strong point of the traditional education at its best. The subject-matter of the classics and mathematics involved of necessity, for those who mastered it, a consecutive and orderly development along definite lines. Here lies perhaps the greatest problem of the newer efforts in education. It is comparatively easy to improvise, to try a little of this to-day and this week and then something else to-morrow and next week. Things are done on the basis of some immediate interest.
DESIGNED AND CARRIED OUT BY 6th YEAR BOYS AND GIRLS, WHO MADE AND PAINTED THE SCENERY AT CHRISTMAS IN ST. LOUIS, U.S.A., AT THE COMMUNITY SCHOOL
and stimulation but without sufficient regard to what it leads to, as to whether or not something more difficult, setting new demands for information, need for acquisition of greater adequacy in technique and for new modes of skill, is led up to and grows naturally out of what is started. The need for taking account of spontaneous and uncoerced interest and activity is a genuine need; but without care and thought it results, all too readily, in a detached multiplicity of isolated short-time activities or projects, and the continuity necessary for growth is lost. Indeed, the new education processes require much more planning ahead on the part of teachers than did the old—for there the planning was all done in advance by the fixed curriculum.

Defining ‘Environment’

I have spoken of the importance of environment, but a sound philosophy of education requires that the general term environment be specified. It must be seen to be dominantly human and its values as social. Through the influence of the social environment each person becomes saturated with the customs, the beliefs, the purposes, skills, hopes and fears of the cultural group to which he belongs. The features of even his physical surroundings come to him through the eyes and ears of the community. Hills and plains, plants and animals, climate and change of seasons, are clothed with the memories and traditions, and characteristic occupations and interests, of the society of which he is part. In the earlier years of education, it is particularly important that subject-matter be presented in its human context and setting. Here is one of the commonest failures of the school. We are told that instruction must proceed from the concrete to the abstract, but it is forgotten that in the experience of the child only that which has a human value and function is concrete. In his nature study and geography, physical things are presented to him as if they were independent and complete in themselves. But in the actual experience of a child, these things have a meaning for him only as they enter into human life. Even those distinctively human products, reading and writing, which have developed for the purposes of furthering human association, of making human contacts closer and richer, are treated as if they were subjects in themselves. They are not used as friendly speech is used in ordinary life, and so for the child they become abstract, a kind of mystery that belongs to the school but not to life outside the school.

The Social Ends of Education

As the material of genuine development is that of human contacts and associations, so the end, the value that is the criterion and directing guide of educational work, is social. The acquisition of skills is not an end in itself. They are things to be put to use, and that use is their contribution to a common and shared life. They are intended, indeed, to make an individual more capable of self-support and of self-respecting independence. But unless this end is placed in the context of services rendered to others, skills gained will be put to an egoistic and selfish use, and may be employed as means of a trained shrewdness in which one person gets the better of others. Too often, indeed, the schools, through reliance upon the spur of competition and the bestowing of special honours and prizes, only build up and strengthen the disposition that makes an individual when he leaves school employ his special talents and superior skill to outwit his fellows without respect for the welfare of others.

What is true of the skills acquired in school, is true also of the knowledge gained there. The educational end and the ultimate test of the value of what is learned is its use and application in carrying on and improving the common life of all. It should never be forgotten that the background of the traditional educational system is a class society and that opportunity for instruction in certain subjects, especially literary ones and in mathematics beyond the rudiments of simple arithmetical subjects, was reserved for the well born and the well to do. Because of this fact, knowledge of these subjects became a badge of cultural superiority and social status. For many persons the possession of knowledge was a means of display, almost of showing off. Useful knowledge, on the other hand, was necessary only for those who were compelled by their class status to work for a living. A class stigma
attached to it, and the uselessness of knowledge for all purposes save purely personal culture was proof of its higher quality.

Even after education in many countries was made universal, these standards of value persisted. There is no greater egoism than that of learning when it is treated simply as a mark of personal distinction to be held and cherished for its own sake. Yet the only way of eliminating this quality of exclusiveness is that all conditions of the school environment should tend in actual practice to develop in individuals the realization that knowledge is a possession held in trust for the furthering of the well-being of all.

Perhaps the greatest need of and for a philosophy of education at the present time is the urgent need that exists for making clear in idea and effective in practice that its end is social, and that the criterion to be applied in estimating the value of the practices that exist in schools is also social. It is true that the aim of education is development of individuals to the utmost of their potentialities. But this statement in isolation leaves unanswered the question as to what is the measure of the development. A society of free individuals in which all, through their own work, contribute to the liberation and enrichment of the lives of others, is the only environment in which any individual can really grow normally to his full stature. An environment in which some are practically enslaved, degraded, limited, will always react to create conditions that prevent the full development even of those who fancy they enjoy complete freedom for unhindered growth.

Developing the Will to Co-operate

There are two outstanding reasons why in the conditions of the world at present a philosophy of education must make the social aim of education the central article in its creed. The world is rapidly industrialized. Individual groups, tribes and races, once living completely untouched by the economic regime of modern capitalistic industry, now find almost every phase of their lives affected for better or worse—and often for worse—by the expansion of that system. What the Geneva Commission reported after a study of natives in the mining districts of South Africa, holds of peoples all over the world, with proper change of some of the terms used: ‘The investment of Western capital in African industries has made the Native dependent upon the demand of the world markets for the products of his labour and the resources of his continent’. In a world that has so largely engaged in a mad and often brutally harsh race for material gain by means of ruthless competition, it behoves the school to make ceaseless and intelligently organized effort to develop above all else the will for co-operation and the spirit which sees in every other individual one who has an equal right to share in the cultural and material fruits of collective human invention, industry, skill and knowledge. The supremacy of this aim in mind and character is necessary for other reasons than as an offset to the spirit of inhumanity bred by economic competition and exploitation. It is necessary to prepare the coming generation for a new and more just and humane society which is sure to come, and which, unless hearts and minds are prepared by education, is likely to come attended with all the evils that result from social changes effected by violence.

The other need especially urgent at the present time is connected with the unprecedented wave of nationalistic sentiment, of racial and national prejudice, of readiness to resort to the ordeal of arms to settle questions, that animates the world at the present time. The schools of the world must have somehow failed grievously or the rise of this evil spirit on so vast a scale would not have been possible. The best excuse, probably, that can be made is that schools and educators were caught unawares. Who could have dreamed that the demon of fear, suspicion, prejudice and hatred, would take possession of men’s minds in the way it has done? But that excuse is no longer available. We now know the enemy; it is out in the open. Unless the schools of the world can engage in a common effort to rebuild the spirit of common understanding, of mutual sympathy and goodwill among all peoples and races, to exorcise the demon of prejudice, isolation and hatred, the schools themselves are likely to be submerged by the general return to barbarism, which is the sure outcome of present tendencies if they go on unchecked by the forces which education alone can evoke and fortify.
New Wine in Old Bottles
Some Experiments in an Elementary School

M. GERRARD

On the assumption that two heads are always better than one, many teacher friends and I have from time to time discussed plans and methods and aims. Primarily at their request I now attempt to pass on some of the material which proved so valuable to myself and my colleagues. There is no magic recipe for making teaching easy. Honest teaching must by its very nature be difficult, and this applies especially when the school is in a slum and there are special factors to contribute to exhaustion. Nevertheless, many slum-school teachers could be less tired than they are nowadays if they could find more satisfaction in their work.

Existing Obstacles

In a campaign for conserving energy, nervous and physical, we must take stock of the forces at work against us. First, teachers are constantly giving out support, confidence, encouragement and inspiration to the children. Second, slum schools are most often housed in old, dark and airless buildings, so close to traffic noises that the teachers are compelled to shout above them if the windows are open, or stifle in a hot and smelly classroom if they are shut. Third, classes are almost invariably too big. There are hundreds of teachers who, like myself, have had to teach in a room too small to hold the requisite number of desks, so that pupils must sit three in one desk, with obvious drastic consequences to the class work, the children’s enjoyment, the necessary discipline and the nerves of the frustrated teacher. Still worse, many teachers have to take lessons in the same room with another, struggling with a class divided from the first merely by a screen head high. There may even be no screen at all. Fourth, in most schools there is a lamentable absence of any kind of rest room for the staff. Modern factories are well equipped in this respect, not as a rule because the directors have become philanthropic but because research experiments have proved that it pays. How much more should this apply to school teachers, on the soundness of whose work so much depends! Nevertheless, out of five schools (and one very modern) where I have taught, three had a small ugly room containing cupboard, table and chairs from classrooms, and a fire: two had only cubby holes for hats and coats: none had a couch.

These points have been enumerated simply to show that I am painfully aware of the tiring influences at work in slum schools, which at present seem unalterable.

The Goal and the First Steps Towards It

In order not to dissipate energy, it is necessary to keep one’s goal clearly in mind. Teaching in a slum school is an organized form of social work. Teachers who like their work will not therefore be principally occupied with pushing on the scholars to win free places or scholarships, though this may happen incidentally. Primarily they will be concerned with helping the children to go out into the adult world cleaner, healthier, happier, more dependable and capable and considerate than were their parents. An attempt to achieve this is, if one takes a long view, a work of national importance.

The first step towards happier and more economical teaching lies in establishing honest relations with one’s head mistress or master. This is often a slow process, because Heads are usually busy and harassed people, whose time is already occupied with a thousand matters, important or trivial. Nevertheless, the advent of an interested and willing member of staff will eventually be recognized. When once the Head is assured of that teacher’s integrity, and believes that the welfare of the pupils is his or her first consideration, then greater scope will be allowed for putting individual plans and schemes into practice.

The next step is to learn to regard school inspectors as potential co-operators in one’s schemes. My experience has been that with rare exceptions they are very ready to give encouragement
and support to any ideas for furthering the progress and enjoyment of the pupils.

The next step brings us into the classroom and face to face with the children. My first class contained forty-four boys and girls from nine to ten years. Poor physique, the result of heredity and/or poor housing and feeding, was a common characteristic, and as the school was near the docks, there was the expected quota of half-breeds. Some of the children were very backward: others, specially the half-castes, showed a specious quickness. In all, they were a difficult collection. The first few days were a nightmare, in which registers and irritatingly naughty children figured vividly. And during my first week-end, spent in recuperation, I determined to discover not only the causes for the naughtiness and restlessness of the children, but how to combat it.

A Class Library

First of all, I attempted to discover why my brothers, my sisters and myself had been so much less restless and bored at the same age as my obstreperous class. I felt that good feeding and housing could not wholly account for the difference. My mother reminded me that as children we almost always had a book to pick up on the odd occasions when we had to sit still indoors. When we were not actually reading, our imagination could play with the stories, so that it was unnecessary for us to find self-entertainment in pinching or otherwise tormenting each other.

During my next week at school, therefore, I explored the reading possibilities. There were ‘readers’ of various dull kinds. The children had no books at all at home. In a mixed class of quick and slow children there are probably at least six occasions in one day when someone will have ‘finished, Miss!’ and it is often that one unoccupied child who starts the mischief. It is not fair to expect these resourceless children to be able to turn willingly to a dull, torn and familiar ‘reader’. Nor are spelling or tables an enjoyable reward for one who has worked hard and successfully with his sums.

I therefore approached the Head—one of the finest and most generous men I have been privileged to meet—and he explained that no other books were available and that there was neither fund nor provision in the time-table for such things. I believed so firmly, however, in the need for this outlet for the children’s energies that I was prepared to plead the cause with any inspector who might be apprehensive about time-table work, and to collect the books myself. The fact that I was allowed to go ahead shows the wisdom of establishing reasonable relations with the Head.

I had no money for books, so I collected children’s books from home and from kind friends, and chose a Friday afternoon to explain my plan to the excited class. The excitement did not diminish when I told the children that there was a lot of work for them to do before the library could be used. Our 120 books had to be cleaned up, backed, numbered, listed and arranged in the cupboard.

A handwork lesson was profitably spent in learning how to back books in newspaper. Part of a drawing lesson was used for the actual backing in brown paper, provided, like the newspaper, by the children: the second part was occupied with cover and title drawing. Reliable children who needed arithmetic practice were chosen to help with numbering and listing. Finally, two careful and tidy children arranged the books on the shelves, and two others were made librarians for the first week. In this way all the pupils took part in the making of the library, and consequently valued it much more than if I had done it all.

The last half hour on a Friday afternoon was spent in easy silence with the books. I chose the book for each child, librarians distributed it, and I entered the child’s name on the page allotted to that book in my notebook. Strips of paper given out at five minutes to four, and inscribed with the reader’s name, made a book marker and enabled monitors on Monday morning to put out books under the desks. A class rule was made that books were never to be read until all work was finished, and then only by teacher’s permission. If, however, a visitor came to talk to me during oral work, books were to be read in silence automatically.

And because the children were interested, the scheme worked and became much more than mere pleasure. The children learnt to handle books carefully: vocabularies were extended and imaginations exercised: favourite pieces were
taken for oral and written reproduction, and stories were dramatized: letter writing was practised in thanking grown-up friends for the books: the behaviour of the majority was steadied, since they had no wish to be deprived of their library books for a week or a fortnight: they learnt to want to share their pleasure. Some asked if friends in other classes could have a book—a request I was sorry to have to refuse. Two children eventually brought Christmas annuals to add to our list: in the course of that year, three-quarters of the class joined juvenile sections of public libraries. In many cases I signed the necessary forms, when they had proved by careful treatment of class books that they were not likely to damage library books.

The softening, settling influence of this introduction to suitable literature was an ample return for our labours. Much of the useless and tiring nagging by which children are urged to ‘Be quiet!’ ‘Sit still!’ ‘Put your feet down’, was rendered unnecessary. Most important of all, a life-long habit of reading must have been formed in a few of the children—a pleasant addition to their resources in a life where street corners and public houses figure most naturally and frequently. The inspector, who made his first visit unannounced, had to be convinced that the taking out of books and silent reading which marked his talk to me was not pre-arranged. Far from questioning the desirability of a scheme which did take up a little lesson time occasionally, he offered the class his congratulations and asked for working details of the plan.

One of my colleagues has gone further and more boldly afield. Faced with the same problems, she went to see if the librarian of the local public library could help with suggestions. Miraculously, he was able to arrange for four hundred books to be lent to my friend’s department. One hundred and twenty children paid the usual library penny in the first week. There must be other helpful librarians lurking in unexpected places—a consoling thought to teachers in similar dilemmas.

Getting to Know the Children

A certain amount of order and quietness having been established, I felt free to embark on
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a voyage of discovery, the results of which would colour my year's work and treatment of the children. I had to get to know each one, and something at least of its home conditions—a difficult task, when a class is large, but very well worth while. Many children are punished when the cause of the trouble is perpetual tiredness or indigestion due to wrong feeding. Fleas, bugs, sharing a bed with two or three others, getting up too early to deliver milk or papers, going to bed at midnight after fish and chips—these are all possible factors to be considered. Some children will talk easily while their sewing is being 'fixed', some exaggerate, and others close up like oysters. Plasticene modelling, drawing or paper cutting lessons can serve double purposes. A drawing or model of 'Our Kitchen' or 'My Bedroom' can be a very illuminating one. Concentration on the handwork leaves no room for shyness or dissembling. Fireless kitchens, bedrooms with one bed holding two queer little figures at each end and another bed with 'Mam and Dad and our Baby' all in one room, are no exceptions. The teacher assimilates valuable knowledge while the children are modelling or drawing rectangles and squares and learning to make simple calculations with accuracy and speed. This will be more useful to them later in life than the more advanced arithmetical formula one can only teach profitably to children from better homes. Thus the ordinary syllabus work is not sacrificed to the more unusual excursion into social science.

And these excursions were very much worth while. A knowledge of the children's home lives enabled me to realize the kind of teaching which would be of service to them. Once friendly relations were established with the Head, with the inspectors and the children themselves, it was possible to try fresh experiments and to think out methods by which the ordinary lessons, including the hygiene classes, could be made more useful and more interesting and more closely linked up with everyday life. These, in fact, were the first steps towards the goal of helping the children to become, during their school lives, cleaner, healthier, happier, more dependable, more considerate for others, more resourceful, and therefore better equipped to face the arduous life before them.

The school supplements the work of the home; children washing before meals at an open air school, Wytham Abbey Estate. (By courtesy of the Health and Cleanliness Council.)
UNDERSTANDING THE ADOLESCENT
MARY CHADWICK

During the last few years so much time and attention have been devoted to this subject that occasionally one finds oneself wondering whether anything fresh remains to be said upon the matter, or if the young persons of to-day still have any problems or conflicts comparable to the familiar trials which beset the adolescents of former generations.

Some problems, doubtless, have been solved; yet the writings of celebrated authorities, and the lectures from educational experts, seem to show that some of the most fundamental conflicts have not yet been grasped. And certainly before an understanding of the adolescent can be accomplished we must first realize quite clearly where the focus of the problems lies and of what separate elements their conflicts consist.

Radically, I suppose, it is always very difficult for one generation to assess the problems of another younger or older than themselves, or for members of one sex to understand the mental processes or conflicts that complicate the life of the other. We who grew up before the War had a very different world to become adjusted to from those who are growing up at the present time, and therefore it is hard for us to realize completely all that this means or to what extent our own memories colour our attitude to the adolescent of the present day.

A parent or teacher may sometimes tell us that he or she tries to understand all the difficulties of adolescents by trying to remember his or her own difficulties and experiences then. But when we come to scrutinize such a statement, is it really a sound criterion upon which to base our understanding? Hardly so, because circumstances have changed so much since then that practically everything is different. Those who tell us that this is their guiding principle immediately lay themselves open to suspicion; firstly, that they have not yet fully realized how vast and basic have been the changes that have taken place, secondly, that they may all the while be struggling to produce the semblance of pre-war conditions and environments for the young folks in their charge, or again, that through some process of identification they are still trying to recapture their own past youth by means of their association with the young.

It would seem that even our best efforts to understand the adolescent can lead to serious pitfalls for them as well as for ourselves. This is always the case when we try to discover the cause and effects of problems of which we have no personal experience. Some readers may, perhaps, challenge this statement and argue that we must all have some experience of the problems of adolescence since we have all passed through this stage. This may be so, but we have not traversed it with conditions as they are now, nor do the young folk have to pass through the same difficulties which faced us, therefore their problems are of necessity different from ours.
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UNDERSTANDING THE ADOLESCENT

ARISING from this argument, however, comes the following conclusion, that a very important difference lies between the problems which emerge from external conflicts with environment and social conditions, and the internal conflicts which are conditioned by deeper psychological trends and instinctual mechanisms within the individual. To some extent these two sections must frequently intermingle, because internal conflicts are often provoked by external circumstances. We come nearer the truth perhaps if we say that the difficulties confronting the adolescent from the necessity of adjusting to present-day social conditions and a modern environment have changed more than the conflicts which are produced from within, i.e. the struggle of the unconscious and instinctual trends to adjust themselves harmoniously within the individual to conform with ideals of ego and super-ego, during this transitional stage between childhood and maturity.

IT would seem to be the general opinion that the adolescent phase is a far less exacting time now than in the past. The view is often expressed with a tinge of envy or regret that life is so much easier for the young folk of to-day. Some people even assert that this lightening of the burden of growing-up will be exceedingly bad for the mature development of this generation and decrease its stability when adult, since the old régime with its Spartan discipline was so beneficial for strengthening the character and will. They forget that this has been said by each succeeding generation for many hundreds of years and yet the human race has not yet died out from sheer ineptitude or degeneracy.

AGAIN, if the old methods were so good for the building of the adult character, it is indeed strange that we find that such a very large number of middle-aged persons are ardent supporters and admirers of the Peter Pan Cult. They usually rejoice also in such plays as Mary Rose or the Immortal Hour, and like nothing better than to join organizations mainly intended for the amusement or recreation of young people. They turn their attention to Folk Dancing and the like, pathetically trying to make up for lost time and to recapture the fun and frolic that was denied them years ago. They fondly hope, too, that such association will increase the mutual understanding and sympathy between the various generations.

HERE they are wrong, however. In such a belief they again show a fundamental lack of understanding of the real working of the adolescent mind and what it likes and dislikes. The young folks may be exceedingly kind, polite and tolerant to them outwardly, but at heart they feel ashamed to look on at these adult gambollings. They, with their young and searching belief in the fitness of things, see a certain lack of decency in the spectacle of older people behaving with so little reserve and dignity. They blush for them in secret, and certainly never mention it, especially to the offenders themselves.

IN ways such as these the adults of to-day frequently give us concrete evidence that although they may talk a great deal about understanding the adolescent and being in sympathy with the younger generation, actually they only do so up to a certain point, the line of demarcation being ruled by the requirements of their own interests and convenience. In addition to this we must not omit to include the working of their imagination, their own phantasy-life and their unalterable primitive or infantile wishes in the production of their views. Out of this material they make a fancy sketch of these adolescents, their troubles, trials, pleasures and desires, and believe it to be an authentic portrait, without realizing that they are standing before a mirror instead of the photograph of another person.

THESE people too are so firmly convinced of the accuracy of their beliefs that they never try to confirm them at the root source by honestly trying to find out what modern young people really think, although they often go through a sort of make-believe of trying.
Strangeley enough some of the most flagrant instances of this fundamental lack of any real understanding of the adolescent have taken place in connection with psychological research, which sets out to increase the sum total of our knowledge of children and young persons. Through questionnaires, intelligence tests and other varieties of psychological investigation and observation, many quite earnest and well-intentioned persons have sought to find out more about the mental and emotional processes of the young by means which, had they any true understanding of the adolescent or the child, they would know must be ineffectual, or at least unreliable, since so much of what they believe to be the thoughts or the reasons for their behaviour are their own deductions or associations based on their observations, and therefore once more a reflection of themselves and the working of their own minds.

They achieve results of a sort, it is true, and they are entirely satisfied with them; but they have never, it would appear, drastically criticized the means used.

For instance, in connection with the use of the questionnaire; it is supposed that these adolescents will answer leading questions about their intellectual, emotional or sexual life, and hand over for public scrutiny their innermost secrets, without any reserve, and, without taking into consideration what those who present them with the paper expect by way of reply. These same persons who are conducting the research will be quite ready to agree with us or to explain to us that reserve and reticence about such matters are some of the main characteristics of young folk of this age, that they find it difficult to express their thoughts or real feelings and so forth. Yet apparently at the same time they imagine this difficulty will, or can be, immediately swept aside because they have asked the adolescents to do this for them. What a wonderful belief they must have in their influence over the young or their charm of personality, if they can so easily perform the miracle of overcoming a fundamental tendency at the mere expression of their wish! And to prove, to their own satisfaction at any rate, that they do possess this power, they give publicity to the results of their research under the impression that what they have gained and deduced is the truth, the whole truth and nothing but the truth. So great is their faith in their power that it seems they are also able to convince others, because the results of these investigations are accepted seriously by scientific bodies and put among their archives to swell the mass of data upon adolescent psychology.

Now this simplicity and self-deception based upon unconscious wishes on the part of psychologists would be amusing if it were not really tragic, seeing that it is actually taken quite seriously by other earnest and well-intentioned persons, educationists and parents, who also imagine that they understand the working of the adolescent’s mind and emotions, although they are actually blinded by their own deeper psychological desires and conflicts.

It is so easy to believe what we want to believe and so hard to recognize the truth of what we want to ignore.

Many of the books that have been written during the last few years purporting to explain all the problems of adolescence show more clearly than anything else the obscuring of their writers’ understanding by personal complexes rather than increased knowledge and a keener insight into the minds of others gained through a study of psychology. This is frequently proved by an author, himself a school authority or even a headmaster, asserting that the interference of an outside psycho-analyst is altogether unnecessary to help a child or adolescent through serious psychological conflict, because a headmaster with some knowledge of the subject is perfectly well able to deal with the matter. But one would have thought that any reflective person with the merest rudimentary first-hand acquaintance with school-boys or girls must know that the head of a school would be the last person in the world, except perhaps the parents, to whom confidences of this nature could be made, partly because they might involve school authorities or schoolmates, or conflicts arising from painful home conditions. It is in cases
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such as these that we are forced to admit that in spite of all that is published about understanding of the adolescent, the time has not yet come when this happy state of affairs has arrived, mainly because those who are attempting to work for it have not yet achieved any real and deep understanding of themselves beyond what is convenient or their own complexes allow.

If we could only approach the adolescents with whom we come in contact with a more open mind—more ready to receive information from them than to hasten to impart it, or to give them the impression that we understand them so well, we might learn something more nearly approximating to the truth. To try to learn from them without appearing to do so by battering them with impertinent questions and clumsily expressed inquisitiveness, should be our aim. If we really understood how much they would appreciate our silent sympathy and understanding, we could find a way of unobtrusively conveying it to them.

**POINTS FOR PARENTS TO REMEMBER**

1. We are too apt to think that we can understand our adolescent children by dwelling on our own youth. Young people to-day have to adjust to conditions which are more complex and uncertain than pre-war conditions seemed.

2. Before we can understand our children we must understand ourselves and our shortcomings.

3. We shall gain nothing by attempting to force our children's confidence.

4. Before we can help our children through the difficulties of adolescence we must meet them with sympathy and tolerance, ready to appreciate the differences between our outlook and theirs. In this way alone can we come to understand their problems.

**THE FAMILY—A BIBLIOGRAPHY**

**The Family**

**Advanced.** *The Family.* E. B. Reuter and J. R. Runner. (Mcraw Hill.)


*Society, Its Structure and Changes.* R. M. McIver. (Lang & Smith.)

*Economic Problems of the Family.* Hazel Kyrk. (Harper.)

**Popular.** *Changes in Family Life.* Sir William Beveridge. (George Allen & Unwin.)

**Parents and Children**

**Advanced.** *Social Development of Young Children.* Susan Isaacs. (Routledge.)

*Growth and Development of Children.* W. Rand & M. Sweeney. (W. B. Saunders.)

*The First Year of Life.* Charlotte Bühler. (John Day.)

**Popular.** *The New Psychology and the Parent.* H. C. Miller. (Jarrold.)

*Parents and the Pre-School Child.* W. E. Blatz and H. Bott. (Dent.)

*The Child, His Nature and His Needs.* (Children's Foundation.)

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*Psychology of the Pre-School Child.* J. Drever and M. Drummond. (Partridge.)

**The Child's Mind**

**Advanced.** *Judgment and Reasoning in the Child.* Jean Piaget. (Kegan Paul.)

*The Growth of the Mind.* E. Kofka. (Kegan Paul.)

**Popular.** *Intellectual Growth in Young Children.* Susan Isaacs. (Routledge.)

**Guiding the Child**

**Popular.** *Difficulties in the Child's Development.* M. Chadwick. (Allen & Unwin.)

*Guidance of Childhood and Youth.* Benjamin Gruenburg. (Macmillan.)


*Normal Youth and Its Everyday Problems.* D. H. Thom. (Appleton.)

*The Management of Young Children.* W. Blatz and H. Bott. (Dent.)

*The Child and Its Problems.* A. Hutchinson. (Williams & Norgate.)
Book Reviews

Changes in Family Life. Sir Wm. Beveridge and others. (Geo. Allen & Unwin Ltd.)

This small volume is comprised principally of the texts of seven wireless talks given in the spring of 1932 by Sir Wm. Beveridge, Mrs. J. L. Adamson, Mrs. Barton, Dr. Hugh Dalton and Professor Ginsberg. These were arranged as part of a scheme of social investigation in connection with a form of questionnaire submitted to all B.B.C. listeners who sent for it. The form was also issued to the Press, by whom, however, it was received with disfavour amounting to 'something like an explosion', a fact, let me say, which will not astonish anyone who has had experience of the attitude of the Press to all serious discussions of sexual life. The publicity resulting from its attitude, however, made necessary an issue of 50,000 copies in place of 20,000 contemplated. Of subscribers who replied, we are told that 90 per cent filled out the entire form, saving the questions relating to family expenditure.

The fact of them having been intended for delivery to radio audiences determined the character of the talks as necessarily popular and easy to follow. They deal with: the actual changes which have occurred in the family, especially within the past generation; the population question; the relative influences of nature and nurture; family economics; the family as a social group; new problems that are raised and the permanency of the family.

The earliest chapters, especially, in spite of their readable style, are packed with striking facts. Let me cite a few. The average Englishman and woman now marry at 27 and 25 years of age. The swing of the country from being chiefly agricultural to being chiefly industrial has been accompanied by changes in the season for marriages. The birth rate, which in 1876 was 36.3, has fallen to 15.8 in 1931—the total of births being now but two-thirds of what it was even thirty years ago. On the other hand, of a thousand children who were born a generation ago, 150 died in their first year as compared to only 70 to-day.

Such figures are given simply as interesting matters of fact, with the barest hint of some old-fashionedness of viewpoint in one of the authors who speaks of the 'bogey of over-population' in spite of there being to-day several million unemployed.

Some of the later chapters of the book are written in dialogue, which is perhaps less suitable here in the printed, than originally in the spoken, form.

Prys Hopkins

One Fair Daughter. Owen Rutter. (Gollancz.
8s. 6d.)

It is in the mode for parents to be pilloried; they are guilty, it is said, of selfishness or possessive affection, which is worse; they are judged, condemned and, at best, let off with a great many cautions.

Mr. Rutter, here, presents a new phenomenon in the cause and cure of parental problems. He is the father isolate; pure paternality. He is 'exhibit A' displayed as for laboratory observation. Twinkle, his one fair daughter, is the re-agent for his assumption of complete parenthood. He brought her up, in fact he brought her everything and everywhere except into the world.

This book is the well-told tale of his experience of child-culture and instructively reveals the present-day attitude compounded of a sincere, but self-conscious respect for the 'personality' of the child along with an unconscious retention of certain parental attitudes that hinder the freedom of growth demanded by modern doctrines.

This reviewer is also father of one fair daughter, and can appreciate the deep satisfactions that Mr. Rutter describes or exhibits in the multifarious associations with his growing child; adequately answering her questions; initiating her into the complex knowledge of things, people, traditions and ideas; watching her self-discovery (Mr. Rutter has little to say of this); and maintaining a poise of impersonality that calls for the purest form of affection.

The new technique requires the parent to watch him- or herself even more than the child. Mr. Rutter appears not to have realized fully that this is the point d'appui of the new relationship. Had he done so the following episode among a few others must have been described differently. '... I saw that we'd both been doing a bit too much and that it had frayed our nerves. So there was a reconciliation. ... That evening all troubles were forgotten when she had the delight of wearing a new blue frock and we danced together. ...' Perhaps reconciliation slipped from the novelist's pen, but if not, then a little more objectivity was appropriate to this relationship.

Mr. Rutter has done a useful job in setting out his experience. Many of us are tackling similar tasks and his account will help as a guide, or a warning, when our decisions, or indecision, raise similar problems.

Albert Lowy

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Runaway Rabbit. Olwen Bowen. (Nelson. 3s. 6d.)
The average child reader is probably harder to please
than the child of fifty years ago, if only because there
are so many writers anxious to cater for him. The
child between five and eight is always specially diffi-
cult. A book, however pretentious, which has not an
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down in the darkest cornet of his bookcase.
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pion’s sedate career for the wildest adventures among
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Great Aunt are a joy and Mr. Brightwell’s gorgeously
appropriate illustrations are entirely in keeping with
the animated narrative.

Jane Oliver

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Penn the Penguin. Allen Chaffer. 5s.

Nelson.
2s. 6d.

Pomona & Co. W. M. Letts. (From the B.B.C.
Children’s Hour.) 5s.
The Youngest Omnibus. 7s. 6d.

Books Received

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Life by E. Graham Howe. (Gerald Howe. 6s.)
The Romance of Reality, by Janet Chance.
(george Allen & Unwin. 5s.)
Modern Knowledge and Old Beliefs. A sequel
to the Churches and Modern Thought. By
Vivian Phelps. (Watts & Co. 2s. 6d.)
All the Ways of Building. A New History of
Architecture by L. Lamprey. (Routledge. 7s. 6d.)
Very interesting and thorough. A book that should
be in every school library.
Fifty One-Act Plays. (Victor Gollancz Ltd. 8s. 6d.)
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Groom, M.A. (Macmillan. 5s.)
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by Angus Wilson. (Pitman. 2s. 6d.)
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compiled for Dramatic Classes.

Small Stage Properties and Furniture. Mrs.
Nesfield Cookson. (George Allen & Unwin Ltd.
4s. 6d.)
A valuable book for all school dramatic societies,
describing, with detailed illustrations, how stage
‘props’ can be made with woodwork, plaster work
and papier mâché.

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H. V. MEYEROWITZ is well known as a sculptor in South Africa. He was closely connected with the work of the Exhibition of Children’s and Native Work which attracted so much attention.

ARTHUR LISMER is Educational Supervisor of the Art Gallery, Toronto, Canada. He is not only an inspiring Art teacher, but is also one of Canada’s greatest painters. He started the Saturday morning classes at the Toronto Art Gallery where over 3,000 ordinary public school children have enrolled; and recently established the ‘Children’s Art Centre’ which maintains ‘open house’ for children who wish to work there, alone or in groups, on any artistic project.

J. H. WHITEHOUSE, who is keenly interested in arts and crafts, is Warden of Bembridge School.

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Headmaster Perry Dunlap Smith
In a changing world, when old ideas of life are being discarded and replaced by those of a modern cut, what part does Art play? asked Mr. Lismer of Toronto at the N.E.F. Conference in South Africa. This issue of The New Era is an attempt to help teachers and parents to work out their own answer to this question by showing them the vital part which Art, properly understood, may play in human life.

As Dr. van der Leeuw pointed out, one of our greatest dangers lies in the fact that man has developed his intellect at the expense of his emotional and spiritual life: in the modern world, technical, intellectual or scientific ability has almost of necessity been at a premium. Art and the artist have come to be regarded as mere luxuries for which the 'go-getting' business man, the scientist intent on the practical application of his discoveries, the economist, busy with problems of production and distribution, have so far had all too little time or inclination. This attitude has inevitably been reflected in our educational system, a system which, evolved during the industrial revolution, regards Art merely as a side show, a subject to be taken as an extra, or at most awarded grudgingly an occasional forty minutes period in the curriculum.

But the new education insists on the development of the whole child, emotional, moral and physical, as well as intellectual, and so Art and self-expression take a very different place. It is true that fundamental and far-reaching changes are still necessary before Art comes into its own as an essential factor in education, but it is encouraging to see how much progress has been made not only in the 'new schools', but under enlightened teachers and directors of education, in elementary and secondary schools directed by the State, in this and in many other countries. The exhibition of children's work, arranged in connection with the Conference in South Africa, was particularly interesting because of the light it threw on the general development of art work in the world's schools. Exhibits from Austria, Canada, England, Germany, Scotland, Switzerland, as well as South Africa were shown, and thanks to the splendid work of Mrs. Pope-Fincken and her Committee, the exhibition was an outstanding success. It was possible to compare the work produced under academic, stereotyped systems of teaching with the free and vital work produced where children were allowed freedom of expression and art work was made part of the life of the school.

Among some of the most interesting drawings and paintings were those produced by Canadian children under Mr. Lismer's inspiring guidance. At the Art Museum, Toronto, he has made it possible for children from the elementary schools to come and draw freely every Saturday morning, and he has also organized an Art Centre, open all day, even at the week-end, where children of all ages may come and paint. Guidance is given as and when they
feel the need for it and materials are all supplied free. His account of his work and his lectures on Art were received with the greatest enthusiasm.

As Mr. Lismer constantly impressed on his audiences, all human beings have a fundamental need to find some way of self-expression, some means of translating spiritual impressions into material forms. At all times and in all civilizations, children, who live nearer to the heart of things than we, their elders, do, have tried to express themselves in Art, in poetry, drama and dancing. They live in a world of imagination and their first attempts to convey their ideas mean little to the adult. But to the child responsible for them they mean a great deal and both parents and teachers should be careful not to belittle these early efforts, however inadequate they may seem. For each child will express himself in a different way, and it is essential that in the early years he should have plenty of material and plenty of opportunity for doing so, both at home and at school.

Unfortunately in most schools, art work is too formalized and far too much attention is paid to technique before the child is ready to grasp its significance. If we want a young child to express his ideas, we must not worry too much about form, for the flow of creative force is easily inhibited by too much attention to detail. In writing, for instance, the first and most important thing is a ready, fluent and imaginative expression of ideas. Punctuation, spelling, neatness, must follow, but without vitality of thought, they are merely dry bones.

The new movement in Art is based on the child’s right to express himself freely. Yet in practice, one finds that there is no such thing as complete freedom: the work produced by pupils of Cizek or Lismer bears the stamp of the leader’s personality and it is coloured by the child’s nationality, traditions and environment. It is, therefore, of supreme importance that the right relationship should exist between teacher and child. The teacher must be a guide and leader rather than an instructor; he must have a real understanding and respect for the child, and finally he himself must have definite creative ability. He must know too much to adopt a system merely because it seems to be fashionable, or to have an inspector’s approval. Nor must he make the mistake of thinking that modern art work is easy.

Good creative work is surprisingly largely a matter of early habit and training: if a teacher of standard four or five were suddenly to allow the children to draw as they pleased, the results would, in all probability, be chaotic, for children who have been taught on formal lines find it extremely difficult suddenly to express their own ideas. On the other hand, if they have constantly been allowed to use their imaginations, even as small children, they will soon come to the stage of wanting to know how to get certain effects. And then technique will become fascinating since the desire to master it comes from themselves instead of being imposed as drudgery from without. At first it is enough to produce a scribble which to them means garden or house or sky and sun. Then they want to convey this to others also; they produce drawings in which they definitely attempt to express their ideas in forms sufficiently near to things as they see them to be recognizable. It is at this point that they begin to need help and seek advice—how can a garden be made to look flat, how can two sides of a house be shown, why do far-away things look small? Their problems must be answered, but it is dangerous to insist too much on the beginnings of technique, the pernicious and superficial tricks of literal representation. For we have to remember that it is more important to preserve the child’s freshness of vision than to make him precociously good at perspective or light and shade. All our early art teaching should aim chiefly at making him sensitive to beauty, so that he may carry his early power of vision and creative urge unimpaired through the routine of his school days.

This is indeed the object of all progressive art teaching. But there are many different methods of working. In the United States, for example, Art is correlated from the very beginning with other subjects in the curriculum. We find children illustrating history and geography and their stories. In most of the
modem class-rooms where the project method is in use, easels, paint and paper can be found in the class-rooms, just as one finds a carpenter's bench in addition to the usual tables and desks. Later on, intellectual work is combined with Art and hand work in the preparations for the dramatic performances given in the school, or else art work is definitely applied to produce necessary or beautiful things for the school. In a very poor school in New York the project teacher had been allowed to take some of the standards and teach them on modern lines. The class-rooms were bare, ugly places, and the first thing she did was to let the children change them entirely. Some drew bold and effective designs on the walls, while others painted the desks and chairs. They altered the rooms completely, and in so doing, they probably also altered the type of teaching which was given there. When Art is made part of the ordinary curriculum in this way, the teacher must, of course, have some knowledge of it or else there must be an art teacher who can be consulted and who will visit each class and help them.

In Great Britain, on the other hand, it is more usual to keep the Art work separate from the rest of the curriculum. In secondary schools, there is generally an art teacher and an art room to which the children go. It was found possible in the early days at Frensham Heights to allow the children the free use of the art room and they would often go there in their spare time and illustrate the work they were doing in the classrooms. For instance, some children of adolescent age were studying the American War of Independence. They had been asked to illustrate their ideas of what took place and there were at least fifteen quite different and extremely interesting representations.

Whether Art is closely correlated with the curriculum, or taught as a separate subject, it is at least essential that it should not be confined to narrow academic limits, but made part of the children's life at school. At present we still attach too much importance to academic efficiency, as represented by examination successes, to make children free of Art, even though Art may be more important to them as a means of enriching their lives than scholastic certificates. True, Art is now considered worthy of recognition as an examination subject, but though this is a gain in some ways, many of the subjects set are a handicap to any teacher of the newer type of art work, while the judges necessarily tend to look for technical efficiency rather than creative ability; for one can be recognized at sight, while it is almost impossible to assess the other.

It is a mistake, however, to think that Art is restricted to drawing and painting and modelling or craftwork such as the printing done at Bembridge School, or the Pottery work at Maltman's Green. Art in some form, should be part of our daily life, whether we work creatively through painting, writing, dancing and drama, or whether we merely strive to move and speak beautifully. So many of us go through life, not only without adding to the beauty in the world, but without even being aware of it. But though we may find it difficult to change our own attitude to life, we can at least see that our children are made free of the beauty and wonder we have missed. We know that the unconscious of the child is in touch with the unconscious of the universe and that therefore there is no limit to the quality, imagination and originality that may be shown in the work of children. There is a growing belief that there is in the world to-day a new type of child, a child of the new age, more intuitive, more closely in touch with the things of the spirit. But it is fatally easy to inhibit or even kill the child's inner urge to create by unwise criticism or by formal instruction given too early. A freer system of art teaching, penetrating into the daily life of the school, would allow our children to express the beauty they feel and see, and enable them to remain sensitive and emotionally responsive to beauty throughout their lives.

To sum up, we believe that Art in its widest sense should be an integral part of every school. But we realize that good art teaching depends almost entirely on the teacher. Modern methods will not necessarily produce good art work, unless the teacher himself understands that these methods are not just new ways of teaching an old subject, but that they imply a new conception of Art as a central part of education and as a vital need in life.
ART EDUCATION through schools has always been a problem. It is a subject that is usually left to languish and, all too often, to drop out of sight of the authorities, who probably realize that it is usually taught by people too inadequately trained to do it well. And as it is not of any importance in the matriculation standard, it is allowed to meander along—nobody’s child—a pretty plaything for talented children or teachers who wish to fill in spare periods.

Art in the old Curriculum

EDUCATION has suffered and is suffering from the obsessions of the professionally-minded educators of forty years ago. Art in the schools has been compressed into narrow routine courses made to fit the standardized curricula of public instruction. Consequently thousands of children remember the Art lessons as a task—something to be overcome—like perspective, colour theories, light and shade, or all the petty tricks of technique and the ephemeral arts of verisimilitude. Innumerable schools have inherited this legacy from Victorian mentors who had the pernicious habit of embalming culture in flagrantly over-decorated caskets and labeling them accomplishments. The teacher with limited experience, formed in a rather scrappy way by a casual training in Art as a subject for teaching and not for personal enjoyment as a creative activity, is only partially equipped for teaching the subject. The effect of ‘compartamentalizing’ it and labeling it Art, giving it a forty minutes’ period occasionally, and expecting it to have a real growth producing value in education, is disastrous to the child.

Art a Necessity for Life

BUT ART is in reality a necessity of life—a developing force within man, growing and moving with the intimate life of all; it must not be kept in special cultural and intellectual compartments, inaccessible to many. It seems natural therefore, that in the school, what we call Art is more than a subject for the talented few; it is or should be a way of developing the instinct for beauty and emotional responsiveness. Yet the programme outlined in the curricula of most schools is an alarming array of dull tasks and second-hand principles, of theories and rules for doing technical things with pencils, crayons or colours. For the young child of eight to thirteen it is altogether too formidable.

The trouble is that we do not understand yet that children are not merely little adults, but distinct and definite personalities who become better and wiser if they are given the freedom that rightfully belongs to them. Adult art—that is the skilled work of professional and gifted people—can never be the standard of achievement for children. What they themselves have to say about life is the only thing that matters. Nor can literal representation ever be a vital necessity to teachers or children; it merely imposes a false standard upon both. On the other hand, co-operation between teacher and child is essential; and the teacher must pay more
heed to the personality of the child as expressed through Art and insist less upon his own. In Art, which includes besides the plastic arts, music, play acting, dancing, poetry and original composition, the child must be freed from restrictions. He needs the teacher as a guide and fellow partner, not as a formal instructor who insists on definitely standardized results.

The Child and Art

The child is the epitome of the human race. His progress from the cradle to the grave is a summary of man’s slow groping towards the life of reason. His concepts of life inform us of the nature of the individual man. We see them again and again, manifested through all the age levels of growing man, in all the activities of mind and soul, whenever the spiritual expression of things beneath the surface is brought to light by individual interpretations.

The child is always transmuting the world of facts into imagination concepts. He begins to draw; the work amuses him, and he finds therein the kind of reality that adults find in religion, in politics, in philosophy and science. The early drawings of children, between seven and nine, tell us what they dare to be, and give us a real glimpse into human aspirations. They are crude and rough-hewn; but they are alive and vitally expressed. There is nothing finished about them—to the adult; but to the child they are perfectly clear, and no attempt to improve the drawing or the perspective will make them any better. In all great Art, there is something rough-hewn and fundamentally rhythmic in design, and all great artists are great children who have carried their world of imaginative concepts into adult life.

The first step in the reorganization of the school art programme is to realize the necessity for the change and to understand why it is essential to the life of education and to the present and future life of the child.

A Wider Conception of Art

In the first place, the subject called Art is in itself too restricted in scope. It is based on the idea that drawing is a useful tool, and that to
design and draw things accurately is a worthwhile function of the hand and eye. This is excellent in itself. The trouble is not that the results are bad, but that they are not productive of anything but tidy habits, facts and processes.

Consider for a moment an exhibition of work by any school that has slavishly followed a routine. Look at the dull quality of the product—tame, lifeless drawings of flowers, the shaded prisms and bases, bowls of fruit, the wavery line in the drawings, and the drab and lifeless designs. The heavy hand of the adult is seen in all the sad array, and because it is mediocre and has no high-lights of achievement nor low spots of absolute inability, we are satisfied with this standard. We have even come to believe, in the new countries like South Africa and Canada, that we shall have to wait for many years until our teaching standards are higher and our general imagination improves before we can expect any better work from our children.

True, teacher training is important. There must be a wider and more thorough grasp of the essential qualities of good teaching—less pedagogy, and more emotional response to beauty, more understanding of the child's personality, and less of the dominative factual elements in technique and professional practice. Examinations, too, must be based upon individual capacities for creative imagination, not on facts and accuracies. Skill and the correct use of media is secondary to the wider point of view—the development, through doing, of the child.

Finally, all programmes of work in Art should attempt to relieve the pressure on the isolated period devoted to the subject. The Art class with its divisions into drawing, handwork, colour, design, etc., should be replaced by a generous plan of co-operation with all other subjects. Art should illuminate history, geography, literature, etc. A child may hear about, talk about, write about, read about a subject. But when he has drawn it, he knows it.

**Art in the Elementary Stages**

A programme of work for school children of seven or eight to fourteen or so, based upon a freer interpretation of the subject, would, roughly, follow these lines.

In the very early stages, of course, a simple kindergarten plan is sufficient to initiate the child into the world of wonder in which he finds himself. The difference is that instead of abstract symbols of shapes and colours and mechanized forms of number and quantities, he is introduced early to flowers, trees and pictures, to materials and textures, to stories and games which develop his own senses, and have a direct reference to nature.

The next step is to direct the child's growing intelligence towards the recognition and application of things in nature to his experience, but always avoiding any kind of regimentation, or conventional routine pattern of teaching. Above all the children should be freed from their natural timidities and their feeling that their technique and habits of illustrating life are faulty.

**Setting the Child Free**

The mediums of expression in use should be flexible; large sheets of paper, paint, clay for modelling, paper for tearing and cutting, pictures for study, simple stories and opportunities for illustrating them, are all necessary. It is essential to accept the child's own method of expressing his ideas, instead of insisting on mass drawings in prescribed media. In fact, the child is to be left free to develop the idea of learning by doing, not to be given rules for doing.

About the age of ten, the children are gradually introduced to new ideas about the way to do things, although drawing does not become a formal study until later in their experience. For the child still has a perfect right to spend another year or two creating imaginatively. But some self-criticism begins to function, and ideas about proportion emerge naturally. Design takes an important step forward, and orderly methods of reproducing simple ideas in sequence and series over surfaces, can be made interesting. Craft-work with linoleum cuts, soap carving, clay modelling, making objects with wire, cork, paper, string, etc., will develop careful habits and provide profitable work for hands and tools.

Every lesson in the standard instruction should be illustrated and not only with pictures. Costumes, weapons, furniture, all the things
children read about in history and literature, can be made. The aim is to find the most expressive medium in which ideas and emotions can live and to avoid meaningless effort for both child and teacher.

**Art and Understanding**

Gradually from ten to twelve years of age there should be unfolded a living picture of the universe, not the historical past but the living present. At twelve the child should know that life will present to him new things of untold beauty, not only in nature and pictures, but in books, in music and in his play. If he cares for these things and seeks to understand them, life will be richer and he will add to his own enjoyment and that of others. If his hands and eyes are appreciated and used as useful servants of his mind, he will come to understand the work of others and to take pride in his own. His leisure will not be wasted in idle dreaming, but be spent happily in listening to, looking at, and doing, the things he loves. He will come to see life not as a series of detached events, but as part of a vast creative scheme in which he himself is a minute but essential part; and he will realize that anything he does detrimental to the peace, health and security of the whole organism is bad for himself and his fellow men.

This presupposes the idea that Art must be an integral part of any scheme of education and not merely an isolated subject. It also demands a new philosophy of Art which will lift it out of the rut of commercial and professional practice so that art education will appear as the encouragement of the whole people towards the appreciation of beauty. It does not eliminate the study of drawing, colour and design and the encouragement of individual talent: it prepares the soil for these by developing the natural instincts of human beings towards the lovelier things of life.
Art and the Adolescent

Higher School education in Art has never really reached a high level. It is usually a series of class-room practices in absorbing facts about appearances and histories of Art. Unfortunately, the course is usually restricted to one year or it is eliminated altogether because it has no place in the matriculation programme, or because the ground to be covered is so vast that it appalls all but the gifted few. Consequently, at the most vital period of growth, when curiosity about the world outside himself and the world within is at its highest peak, the adolescent is automatically cut off from Art except as a means of practising the use of various art media.

Yet this is the most creative period of life; unless the artist is born in man at this time, he sinks completely into the herd. It is now that the adolescent should be encouraged to use his natural curiosity about the body, about sex, about literature and science, his play acting and musical talent, his love for games and dancing and normal enjoyment.

This is the point at which Art becomes conscious. Immaturity of expression no longer interests the youth of fifteen. He wants to do things intelligently; indeed, he is too willing to drop all his imaginative capacity to achieve technical success. Any educational programme should therefore be arranged to prevent this and to help him to become, not a weak member of the herd, but a consciously creative individual.

The outline here suggested is designed to use the curiosity of youth as a creative force. It attempts to correlate Art with all the activities of life and all the subjects of the school curriculum. This of course, is merely an outline of a suggested syllabus.

1 Study the Body, its structure, proportion, grace, symmetry, action and purpose. Let the pupils draw from the living body and satisfy their curiosity about sex differences. Transmute into beauty the significance of form and proportion. Destroy the puritanical hostility to beauty and the physical self. Health and Beauty are one.

2 Study Costume, for the story of clothing is fascinating, and so is the history of adornment for war, peace and pageantry. Art can be linked with history and literature through drama and the production of plays, the drawing of costumes, the making and painting of scenery.

3 Study the Things that people have used, the things that are woven, carved, beaten in metal and moulded in clay and have served the needs of man in war and peace.

4 Study the Origins of Architecture, from primitive shelters to the building of cathedrals, palaces and houses. Study the story of man through the architecture of his times and country.

5 Study Pictures and Sculpture, showing that these are typical strivings of the human spirit to create in life a finer morality and sense of beauty, and that these things are the product of important movements in the spiritual aspirations of man. Fine Arts are expressive of the changing ideals of humanity and they should be understood as such, and not assessed merely through likes and dislikes, prejudices and faulty estimates as to their quality and appearance. Show that Art is a living link between the past and our present aspirations.

6 Study the Meaning of Ornament and Symbolism, peasant Art and its relation to national growth. Arrange courses in design and experiments in simple rhythm and designed units. Then study such abstract things as proportion, unity and balance of form and colour. Give some explanation of what is good in familiar objects, clothes, pottery, furniture, rugs, etc.

7 Study Art in Relation to Economics and Commerce. Show that the creation and preservation of beauty in town and country is essential to happiness and dignity.
STUDY DESIGN IN NATURE. All created life has a purpose and the pursuit of beauty is a primary instinct. The human animal has a vital excess of energy and thought which is turned to the production of beautiful things. This is the natural function of design in daily life.

FINALLY THERE IS THE SCHOOL ITSELF and the quality of its emotional life. A school should not be a completely finished thing from the start; it should grow according to the needs and aspirations of staff and students.

The Teachers' Part

THE FOREGOING OUTLINE of a possible course for Art in the schools is given here as an integral part of the whole course of study in all subjects. Each elementary school should have an Art teacher specially trained with at least one year in an Art School to his credit. All children over the age of ten should have the benefit of his services and he would be in charge of all Art instruction. He would correlate the subject with the instruction in other phases of the school curriculum, with music and play, with manual training and domestic science. Each secondary school should have a special Art supervisor and instructor, and he should have, in addition to the University course in Teacher Training and Art, a definite and recognized talent acquired through natural enthusiasms and ability and by thorough training.

Before progress can be made along these lines, the importance of the Fine Arts and Crafts in education and in life must be understood. From Universities, Art Galleries and Museums, down to the early standards of elementary schools, the plan must be conceived as part of a whole scheme, working through the educational system in efficiently graded steps, reaching out into all subjects and encouraging all attempts to achieve a measure of experimental experience from independent effort.

When we can see education as a creative force, viewed and directed by an unfolding plan, suited to the needs and aspirations of a new people, we shall see Art not as a professional skill or a subject in a curriculum, but as a means to a richer way of life for all.
This abridged account of Dr. van der Leeuw’s speech at the New Education Conference in South Africa is the only one available. In it, his scheme of education, based on activity in workshop and studio and linked with real life, is briefly outlined. It is the solution he offered of what he conceived to be civilization’s immediate danger—the abnormal growth of man’s intellect at the expense of his emotions, his physical powers, his moral outlook.

Man is no longer whole. He has become a house divided against itself. Intellect, emotions, actions, are almost independent of one another. It is as if man’s life were divided into water-tight compartments and the integration, the living relationship between the parts, is in danger of being lost. In this state, there is a very real menace to civilization. Man’s technical achievements and scientific advances have changed the very face of the world, but emotionally, physically, morally he is not equal to the things he has achieved intellectually.

Man’s Loss of Integrity

Education is largely to be blamed for this process of intellectual development at the cost of integrity. We cannot say that education is entirely guilty, but it is part and parcel of a general voluntary process of mankind, a process by which man has travelled away from the centre of life to the circumference of being and has thereby lost the sense of wholeness, not only within himself, but also with regard to the world. In this, education has played an onerous part, especially in the isolation of the intellect. . . . Just think back to your own schooldays and see how arithmetic was taught by imaginary boxes of apples on the blackboard. In this you find the germ of that development of the intellect away from the reality of life which is one of the chief ailments of civilization. Instruction that taught you nothing about life, answers that had no relation to any of life’s questions: these were the crimes of the old education. The teacher was the fount of wisdom and the children were so many empty vessels, set in rows, into which this wisdom had to be poured. So much history, so much arithmetic, so much geography had to be imbibed, whether it was interesting or not, whether there was any zeal or not. This isolated development of the intellect, this division between reality and intellectuality, must be laid, to a large extent, at the doors of the schools.

Intellect, Education and Reality

Now the principles of the New Education regard the child as a growing creature, and the teacher as one who will surround him with material for his growth. The teacher is no longer the fount of all knowledge, but the director of the spontaneous activity of the child. This demands new qualities in the teacher, above all a quality which was least considered under the old educational methods,—that of observation. Formerly the teacher had to be so active and positive that he had no time to
Relating Education to Life

In most schools the workshop and studio are side-shows. People think it is nice that children should learn something about carpentry or metal-work or clay modelling, or music or dancing or painting, but these side-shows must not infringe too much upon the real business of the school.

As I see it, the workshop should be the very basis and heart of the school. I am not advocating that the schools should become vocational centres where the children become efficient in manual work. My conception is entirely different. I am urging that all the work of the school, including the most difficult theoretical work, should be undertaken only in order to solve real problems that the child comes up against in the workshop and which arise in the actual handling of material there.

If the workshop were the starting point of all the work of the school, whatever intellectual knowledge comes to the child would not come in an abstract way, unrelated to reality, but in vital relationship to the child’s activities. Where a child needs theoretical knowledge in order to get ahead with some activity he is engaged in, you may be sure that he will attain that knowledge in one tenth of the time he would have required in an old-fashioned classroom.

Take, for example, the very intricate system of English weights and measures. I once opened a small shop in a school in Australia. The children measured goods, kept books and accounts and so learned the arithmetic which, in the form of ‘tables,’ is so difficult and tiresome, very quickly and without realizing that they were learning anything.

The Workshop School

In the Workshop School, all theoretical subjects will relate to practical problems. All class-rooms would be laboratories in the Dalton sense—rooms dedicated to some particular subject, where the child will come to do his work on that particular subject—where he will observe. Now it is the child who is active, and the teacher can only truly direct his activity by watching not only the obvious things—movements, actions, emotions—but the inward things of which these are symbolic.

This is a great advance. A further advance may be noted: it is now the child who sets himself the problems, or rather who faces up to the problems set him by life, and it is the child himself who solves them. The aim of those who plan his environment is to provide him with a sufficient variety of problems for all his needs, and with full opportunities of solving them to his own satisfaction.

So the teacher becomes the director of the spontaneous activities of the child, and we have done away with two of the main objections to the old education: the abnormal forcing of the intellect and the posing of questions that have no relation to the personal needs of the child, with set answers that have no relation to life as a whole. In the light of this principle I should like to consider the use of the workshop and studio in modern education.

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A writing pattern by a child of six in a school under the London County Council

find all the material necessary to enable him to answer for himself the problems that that subject presents to him.

Thus, in the workshop will be found a vital link between the manual work done and the theory which enables it to be done perfectly. Intellect will again become a tool which the whole man will use as a necessary, but not unique, way of apprehending the whole world in which he lives.

Developing the Artist in Everyman

The studio will also play an essential part in the workshop school. In most existing schools it, like the workshop, is a side-show. As you know, in some schools, games are an essential part of the school life, so much so that if games were taken away the whole life of such schools would be different. I should like to see the studio so essential a part of the school that, if it were taken away, the whole life of the school would be different. If the studio held such a place in the school, it would be found that art can mean very much more in the life of every human being than it does at present.

We may roughly divide people into two kinds: the so-called practical man, who is executive but lacks vision, and the dreamer or idealist, who sees what things should be done but lacks the ability to do them.

In the artist, these two aspects of life are united. He can both see the vision and translate it into reality. Not every one can be an artist in the sense of being a great musician, painter or architect, but every one can realize in some measure the two aspects of life, the visionary and the executive, and there is no better way to help a child to find a harmonious solution of the two than in the school studio. He may not become an artist, but the work done in the studio should give him a new conception of life and should equip him better for whatever kind of work he may ultimately do.

If, through a type of education such as I have put forward, we could co-ordinate action with emotions and intellect, a very different humanity would emerge, a humanity in which intellectual problems would not be unrelated to the rest of life.

We want to bring about in the children whom we educate that wholeness of being which is the foundation of happiness, that awareness of life which modern civilization has lost, which modern man slings away, though without it he cannot live and be happy, but must remain a thing of unrelated actions and desires.

Do not think that my idea of basing the school on the workshop is merely a point of method. To my mind it is a conception of education so fundamental that if it were really carried out in the right way it would bring up a generation that would change the face of the world.
Children's Art and the London County Council

The drawings of children in schools under the London County Council attracted considerable attention at the exhibition held in Johannesburg and Cape Town this summer. This account of an afternoon spent watching the children at work gives some idea of the methods used and of the interest shown by both teachers and children.

SEVERAL exhibitions of the drawings and paintings made by children in school under the London County Council have been held and all of them have attracted enthusiastic interest. But though the drawings themselves are fascinating, a visit to an ordinary painting class in an L.C.C. school working along the new lines is still more so.

For these drawings are produced by ordinary children in ordinary schools, taught by the ordinary staff. Nothing is due to environment; in fact, there is a significant contrast between the dreary neighbourhood of grim streets, and gaunt grey buildings, and the gay and original work produced by the children.

In the Infants' Department of the first school we visited—a typical elementary school in the middle of a slum district—nearly all the classes were painting. The top class of six and seven year olds was just going to begin. Forty children were settling to work at desks and tables or, if they were lucky, at easels. Once they were all equipped with large sheets of paper and sticks of charcoal, they were told to shut their eyes and 'see' the pattern they were going to make. In a sudden hush they all screwed up their eyes; then there was a scuffle as they started to draw, eagerly and rapidly. Soon the room was quiet again; each child was absorbed in the design he or she was drawing. Each one knew exactly what he or she wanted to do, and whether they had 'seen' simple or complicated patterns they all drew with vigour and assurance.

Making Writing Patterns

The designs are based on curves and loops and angles, the groups of movements associated with handwriting; for this method of teaching design goes side by side with a new way of teaching running handwriting instead of the ordinary script. These basic forms are practised continually in every writing lesson and used again, combined, in any way the children choose when they make their patterns. Some used curves, others mainly angles which made up starry diamond patterns; but quite a number were doing complicated alternating designs in which angles and curves were combined.

They drew very rapidly, and though some of them folded their sheets of paper so that the crease would help them to keep their pattern straight, most of them trusted to their own judgment and they hardly made a mistake in their spacing. If they did they wiped it out, but on the whole there were remarkably few erasures for the children seemed to have no difficulty in putting on to paper the patterns they had visualized. They worked quickly, partly because they were so sure of themselves and partly because they drew with a loose, relaxed arm.

As each child finished his drawing he got up quietly and helped himself to the colours which stood, ready mixed, in jars on a table. Soon all the children had started to paint. Some used several colours, others two, and some only one. Visitors could wander about and look over shoulders unheeded, scarcely noticed, for these children concentrated all their energy and all their attention on the painting.

The younger classes worked in the same way, though the designs were not usually so elaborate. There was perhaps a little less assurance and a little less control, but the essential quality of the work was the same.

In all the classes the general level of the work was high, and some individual efforts were outstanding. As a whole it was characterized by gaiety and freedom, by pure colour excellently placed and by that strong and rhythmical line which so many adult art students try in vain to capture.

Free Paintings

The same qualities appeared in the free paintings which were being executed by the girls in a junior school. The teacher began by describing a scene as vividly as she could and then each girl drew her idea of that scene. The episodes described are always taken
from the life which all the children know; walks in the park, queues at a picture house, ping pong matches, sentries at the Tower, gossips at a market, gossips at a street corner. That particular afternoon the teacher described two gossips in a waiting room and most of the pictures showed considerable powers of observation, a great sense of character and unusually good composition. There was very little sameness about the pictures and the best of them were remarkable for a feeling of form and solidity and a certain charm.

Some of the work produced by the older children was also remarkable for its strength. Pictures of demolition in progress at night were particularly effective. Energetic figures, blocked in the foreground, machinery roughly indicated, vivid colours and deep shadows made up paintings that jangled with sound and vibration.

Surprisingly good work on these lines is also produced by some infants' departments. Some of the children who are new to it seem to find it difficult at first, but in quite a short time they seem to do it easily and well.

The Developing Gift
The work of a top form in a really good infants' department is perhaps more strikingly good than the corresponding work of the lower forms in a junior school. The teachers seem to agree that the seven or eight-year-old has a sudden flowering of maturity and reaches a peak of achievement. After that the work may stand still for some time, but between eleven and fourteen there is another sudden advance and a new peak is reached. After that there is a new decline. Sometimes the gift survives adolescence and becomes real talent, but sometimes it never emerges again.

The Teacher Stands Aside
The method itself is intensely interesting because it combines creative work with discipline. Within the limits of the forms in which each pattern* is made and the description on which each picture is based, the child is completely free. The success of the method is also enlightening: it depends so little on teaching and yet owes so much to the teachers. Their understanding, imagination and readiness to stand aside and allow each child to draw its own ideas, their appreciation of the subtle qualities which are more precious than technical accuracy, are the essential factors without which this method can never succeed.

Vision and Adventure
Of these two kinds of creative work, design and free painting, it is obvious that design will always reach a higher level of technical proficiency. For the children understand and know the forms they are using and their own instinct for design and colour is a sufficient guide. But when they draw pictures of the life about them and attempt to represent people and things in a recognizable form, they are faced with an almost insuperable obstacle. Observation alone cannot enable them to draw figures, nor to understand the laws of perspective or the subtler aspects of light and shade. It is as useless to judge these pictures by the conventional standards of technical excellence as it is to condemn the Italian primitives because they had not yet discovered perspective. Both have the same qualities of vision and adventure, and these children's drawings do show to some degree the essential qualities, without which no picture, however perfect its execution, can be good. They have a vigorous sincerity, vitality and movement, a feeling for design and imaginative vision. They are creative; they have the qualities which are so easily dissipated when technique, which blindfolds imagination, is acquired.

*The illustration on page 240 is reproduced by courtesy of the University of London Press from Miss Marion Richardson's book, "Writing and Writing Patterns," which they will publish shortly.
A Private Press at a Public School

An account of its work and influence at Bembridge.

O ne of the creative manual activities which has been founded at Bembridge is printing. Its direct cultural and educational influence has been very great. The press has become the centre of many important activities. Each term we have produced a large magazine, entirely set up and printed by the boys, and illustrated with woodcuts done by the boys.

I should like to state some of the advantages which our experience leads us to think arise from the possession by the boys of a printing press.

Printing and Creative Work

It has given a new interest to many of them in their English work, and especially in creative English work, through being able to set up in print things written by themselves or their friends. Quite unconsciously it has improved their spelling and their literary style, owing to the precision necessary in the operation of printing. But I put first the encouragement of the creative spirit in their English work.

A second important result is that by printing in the historic method, following the example of the first printers in the arrangement of their pages, in observing perfect simplicity and in abstaining from mixing types, they have acquired from experience a certain standard, simple it may be, of taste and criticism which has an influence far beyond the limited scope of printing.

A third important result which I notice with great interest is that practising a great craft and realizing at first hand something of what it means, boys are enabled to look through a window—a little window it may be—but to look through a window upon the great world of industry and to understand in a way they could not do otherwise something about industry and those who follow it.

A fourth important influence is the fact that it is possible to unite in some degree art work with the printing press. At Bembridge there is a Woodcut Society, the members of which all design and cut blocks, which are reproduced in the magazine.

But mark what follows. I have always felt that one of the great problems of schools and of educationalists and of all who have the care of the young, is to give them real interests which will fill up their spare time whilst they are young, and which will give them real interests and lead them to other and greater interests when they are grown up. And all creative activities which children are allowed to follow at school have this immediate advantage, that they solve the problem of leisure hours; they give them interests in their leisure time, the benefit of which in every way could scarcely be overstated: and as they grow older these interests extend.

A Craft for Leisure

If I take the example of the printing press, it is only one example I could take of many. I have seen this from my personal experience, that boys in their spare time, without any suggestion or compulsion of any kind, will come and make suggestions as to how they could use the press in their spare time, things they would like to write and then print upon it, things they would like to print for other boys, things they would like to print for the service of the School. So that there are some boys to whom it makes a special appeal, who are always to be found doing useful things in the printing room, printing things that they have written or that others have written, and finding a source of great education and joy in consequence.
Maltman's Green Pottery

A practical article dealing briefly with the necessary equipment and its cost

Equipment

1. A well-lighted shed or an old greenhouse, that should be at least 23ft. by 10ft.

2. Down the sides should be benches for working at, and an extra bench down the middle also at which to work. One part of the bench must be very firm for 'wedging' the clay.

3. One potter's wheel, two if possible, preferably at the ends of the middle bench.

4. At one end of the room a sink and tap with a plentiful supply of water.

5. Cupboards underneath the side benches for storing clay, etc.

6. It is necessary to have plenty of shelf room, preferably at the end of the room opposite to the sink for the drying off of the pottery before glazing, and also for storing the finished work when glazed. It is best to have these shelves where there is not too much traffic in case of accidents, and to have them set back as far as possible. Shelves are also necessary down the side of the room for glazes and also for partly finished work. The height of the benches from the ground should vary according to the ages of the people learning. The average useful height is 2ft.6in., but in the case of children as young as 5 or 6 years old lower benches to work on would be necessary.

7. A few stools for sitting on while working, varying according to the height of the bench.

8. Ordinary galvanized dust bin with lid for storing clay.

9. One or two pails for slip, broken pots and dry clay which will be damped down and used again.

10. A few large biscuit tins for keeping pots damp.

11. A number of old cloths of house-flannel or some absorbent material, for damping down. (Old vests, etc., do admirably.)

12. A number of wooden boards for working on which can easily be made by the woodwork class and about a dozen circular wooden 'bats' on which the pots are 'thrown.' These latter are not absolutely essential.

13. About half a dozen ordinary enamel bowls of varying sizes.

14. Odd tools, such as wire, sponges, zinc-throwing tools, copper-turning tools, wooden modelling tools, rulers,
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wooden callipers, palette knives, several wooden rolling pins.

15
Cones, stilts, etc., for firing.

16
One No. 80 Phosphor sieve for sieving glazes and slips.

17
One ordinary ‘Flit’ spray for spraying glazes.

Necessary Working Materials

CLAY. One cwt. goes a long way if used carefully.

GLAZES. About 6lb. of white transparent and a pound or two each of different coloured glazes are enough to begin with.

Underglaze colours and a little gum arabic.

Ground flint.

A few oxides.

Next, The Kiln

This should be in some perfectly safe outhouse.

We had very little choice as to a kiln when we began some sixteen years ago, and worked with one stoked with coke. This, from the point of view of the pottery, was satisfactory, but it caused a great deal of labour.

About eight years ago, on the advice of the Glasgow School of Art, we bought an American kiln which works on oil. This in its own way is satisfactory except that if the spare parts wear out we have to send to America and the result is a delay. Since then there have been many good English kilns on the market, both electric and gas.

Next, we find it advisable not to have more than eight girls in the clay room at the same time, and that each girl should be taught individually. It does not, therefore, matter if the girls are the same ages.

The packing and unpacking of the kiln can be done by the girls themselves, but the actual firing must be in charge of a mistress on account of the possible danger through lack of experience or carelessness.

It is advisable that overalls should be kept for pottery only as they become slightly encrusted with clay which leaves fine dust on the floor or which drops off it.

Expenses

£15 to £20 should procure all these necessaries, including the wheel but excluding the kiln and the actual shed and benches.

A good gas kiln can be procured for £25 and the cost of a satisfactory wheel is £6.

ROUGH ESTIMATE OF RUNNING COSTS FOR ONE TERM

<table>
<thead>
<tr>
<th>Item</th>
<th>£</th>
<th>s</th>
<th>d</th>
</tr>
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<tbody>
<tr>
<td>Clay 2 cwt.</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Glazes</td>
<td>1</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Plaster of Paris</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Oil for 9 firings using 7 galls, per time at 1s. per gall.</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>£6</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

This expenditure is covered each term by working out the proportionate cost of each pot for which the children themselves pay. The price varies slightly from term to term, but generally speaking by charging 1s. 6d. for a large pot, 1s. for a medium sized pot and 9d. for a small one, when finished, the cost of all ordinary working materials and firing is covered.
The South African Exhibition.

H. V. Meyerowitz

This Exhibition, held in connection with the N.E.F. Conference in Cape Town and Johannesburg this summer, owed much of its success to Dr. E. G. Malherbe and to Mrs. Pope-Fincken and her Committee.

The exhibition, which included examples of the work of Austrian, Scottish, Canadian, English, Czechoslovak, American, German, Swiss and South African children was of great interest to South Africans and visitors. South Africa has been suffering from a system of art education derived at second-hand from England. It is difficult to dislodge such a system, and it was therefore valuable to consider the results obtained in England, and to compare these with the work produced in other countries.

The Need for New Methods

The exhibition confirmed the view that no successful art system can ever be second-hand and that old methods of art teaching, and art teachers of the old type, must be replaced by something new. As much time as possible must be given to children so that they may do what they like, when they like, under the sympathetic guidance of artists. But they must be the very best artists, because only these are good enough to be with children. The strong personality which radiates enthusiasm and creates the right atmosphere for artistic creation is essential.

Although Cizek’s first principle is never to touch a child’s work, a Cizek school without Cizek, the Toronto Art Gallery without Lismer, the London schools without Miss Richardson, are impossible.

Few of us will forget the vigour of the Canadian exhibits, a true and unadulterated expression of the children of that northern country with its vast spaces and pioneer spirit. The exhibits from England and Scotland, on the other hand, were painstakingly accurate in their execution and thoroughly unimaginative, except for the vivid renderings of London life from the L.C.C. schools and the Penny schools which were unusually good.

The famous Cizek originals, much travelled and admired, could be divided into two groups, the slightly sweetish and sentimental ones of the older school and the new ones which were truer perhaps to the child, some of them reflecting ‘Die Neue Sachlichkeit’ seen through children’s eyes. The Czechoslovak section, very free in the early school years and with not very happy academic tendencies in the higher schools, but in the good kunstgewerbliche tradition, showed an amazing aptitude to direct and awaken the child’s powers in that direction. Fashion and advertisement designs were outstanding and were the only ones of any value.

The Dalton schools showed examples of what can be achieved under their plan when good artists are at the disposal of the children. Some of the older children produced compositions of perfect balance and design. Switzerland showed a collection from the Pestalozzianum of a very high standard. But perhaps the highest degree of excellence was reached by the German exhibits, collected from many schools by the Zentralinstitut fuer Erziehung und Unterricht, Berlin. It was a reflection of the elation which German Art experienced during the war and post war period. A certain dignified austerity, not without occasional humour, predominated.

Preserving Native Art

The Bantu exhibition was divided into three groups, the remnants of good classic Bantu arts and crafts; then the results produced by one or two sensible people who realized that they could only preserve and perhaps help technically with extreme tact and taste, and some good examples of industrial art. The rest was a nightmare.

The Bantu population is essentially a peasant one, and it has an applied art which is certainly worth preserving and developing. This art is of natural growth and typical of Bantu society, and can be in no way improved by people who regard it as a manifestation of savagery. As a direct result of the exhibition, the heads of various departments are taking steps to preserve this expiring tradition.

Altogether, the exhibition was a great success, though at first the teachers of European schools were inclined to be sceptical and tried to point out that many of the schools producing good work were better endowed than those in South Africa. But in the end it was felt that it would be worth while aiming at a very high standard, even if it cannot be immediately reached. The Art section in Cape Town will make a public appeal shortly, and will also make representations to the education authorities for the introduction of radical changes in the present system of art teaching.
International Notes

Fellowship News

WE VERY MUCH REGRET to inform members of The New Education Fellowship and readers of The New Era that owing to the sudden death of Captain Ensor in South Africa, Mrs. Ensor has had to leave England for Cape Province immediately.

World Fellow Teas

EVERY FRIDAY at 5 p.m. tea is served at the Headquarters of the New Education Fellowship, 29 Tavistock Square, W.C.1, for members and inquirers. On 7th December Mr. C. H. Sharp, Principal of Abbotsholme School will speak on Education for Citizenship in 1950 (with epidiascope pictures), and on 14th December Miss Winifred Harley of the Merrill Palmer Nursery School, Detroit, will give an account of some of the nursery schools she has visited in Europe and America.

England

THE ANNUAL meeting of the English Section of the Fellowship will be held at University College, London, at 3 p.m. on 1st January next. The meeting will be followed by tea at 4 p.m. and at 5 p.m. Prof. J. H. Nicholson (Professor of Education at Armstrong College, Newcastle-upon-Tyne) will lecture on Freedom and Authority in Education.

India

A NEW GROUP of the New Education Fellowship has been formed at Tumkur, Mysore State. Secretary, Mr. N. S. Subba Rao, Director of Public Instruction Mysore, President, Mr. C. Ramanuja Ivengar, District Educational Officer. The Committee of seven includes representatives of Mission Schools, Urdu Schools, Kannada Schools, Womens' Education, Primary Schools, Inspectorate, Vocational Education and Public Schools. The Headquarters of the Group are at Government High School, Tumkur.

Mr. Jugal Singh, near Power House, Bikaner, Rajputana, is hoping in the near future to form a group in Rajputana.

Hungary

INCREASING distress in Hungary is forcing the educational world to take more interest in children during out-of-school hours, and an education committee dealing with out-of-school activities has been organized in Budapest to establish contact with the children in their playgrounds.

The Soziale FrauenSchule, under the direction of Professor Maria von Balogh (Secretary of the N.E.F. in Hungary) is co-operating with the Museum for Social Hygiene in working out a sociological description of 4,000 workless in order to explore the hygienic and psychical ill-effects arising from unemployment. The Soziale FrauenSchule is also organizing a school for Welfare-Workers in factories, the first of its kind in Eastern Europe.

The Hungarian Parents Association is also investigating the problem of the emotional development of children of divorced parents.

China

THE NATIONAL Child Education Association of China, which has 1,000 members scattered all over China, has become a Service member of the Fellowship.

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THE JANUARY NUMBER OF THE NEW ERA

will deal with AUTHORITY AND FREEDOM in home, school and society
The wider interpretation of art which we believe to be necessary should make us seek beauty in every aspect of life. In this article, an artist describes how, through muscular control, life can be made happier and bodies more beautiful.

At the height of her great success as a concert pianist, Maria Levinskaya was seized with acute muscular cramp which threatened to put an end to her career and make her a cripple for life. The medical profession could do nothing for her. And so, though she well knew the difficulties (she is a doctor's daughter), she determined to learn how to cure herself.

The First Stage

The veriest layman is aware that his brain controls the actions of his body. Yet when he raises his arm, or turns his head, he has but the vaguest idea of how he does it. The action, the control of the muscles is subconscious. Levinskaya set herself the almost impossible task of learning to control her muscles consciously, and by the deliberate and co-ordinated exercising of them, gradually to cure those that were incapacitated and almost atrophied.

It meant many months of intense concentration, many months of laborious anatomical research, but eventually she triumphed, and became again muscularly normal.

That was her first achievement.

She then saw that what had taken years to do for herself, she might do for others in quite a short time. It was the research that had taken so long. The actual cure was rapid. Levinskaya began treating other sufferers from cramp. Pianists, typists, telegraphists, writers, muscle-bound athletes came to her. She has never yet undertaken to treat a case but what she has treated it successfully, and she has treated scores. A record like that defies criticism, though Levinskaya has had that, too. It is the way of the world to regard anything new with suspicion, but in this case the critics have retired, baffled. The proof, afforded by her success, of her genuineness has been too much for them.

That was her second achievement.

Levinskaya The Musician

The principle underlying all her work is this conscious muscular control. What she calls co-ordination—mind actively and correctly controlling muscle.

The same principle underlies her unique success as a pianoforte teacher. It is as the musician that the world knows this supremely talented woman. Her book, The Levinskaya System of Pianoforte Technique and Tone Control, is the most scientific presentation of the subject ever offered. Her child pupils have given public concerts so perfect that critics have hailed them as gifted with genius. In reality, they are supremely normal children. Their gift is the priceless one of Levinskaya's training.

That was her third achievement.

A Message to Everyman

That would be sufficient for most people, but not for Levinskaya. Always studying and inquiring, she soon realized that her same principle of conscious muscular control had a
universal importance, quite outside her specialized work.

It is strange that a musician should have a message of interest to the whole civilized world. A message, incidentally, that has nothing to do with music. Yet Levinskaya has, and she means to give it. She means to add just one more to her list of achievements, and this perhaps the greatest of all. She wants to show Mr. Everyman the true meaning of physical culture. And that is not what Mr. Everyman thinks it is.

That is the purpose of her book, *The New Technique of Living*, which she has just finished, and is now revising.

I went to see her about it, and when I explained that I was not so much interested in her piano work as the other she was surprised. 'The health side of my work', she said, 'means so little in itself to most people. And yet improved health and mental ability could be given to everyone tomorrow if they were correctly educated. Ignorance has a lot to answer for. You see proof of it everywhere around you. The way people walk, play games, hold their heads, write a letter.'

'Do you think, then, that the average person is unfit?'

'Of course. No one is fit who cannot get the very best out of himself; he cannot do that unless he is correctly co-ordinated. And how few are! I once told a doctor that I considered ninety per cent of civilized humanity wrongly co-ordinated. "I disagree with you, Madame," came the reply, "ninety-eight per cent."

'Of course in my own work I mostly deal with the more serious cases. Cases where ignorance of the proper muscular functions, combined with the type of work on which the person is employed, have together produced cramp. Once put right, they will never suffer from cramp again, because I cure them by teaching them how their muscles should be used.'

**Her System**

'What line, exactly, does your system take?'

'It has three stages. First, I teach the patient to analyze himself, to find out which muscles are not used, which must be used. I call that localization of muscles. Then I teach him conscious action, how to express with his will the required orders directly from the brain through the nerves to the muscles. Lastly comes the acquirement of habit—correct habit this time, not the old, untutored habit—and the subconscious once again takes control. In this way only can real unity of thought and action be achieved.'

**Child Education**

I asked her if she thought the ordinary individual could train himself to co-ordinate mind and muscle.

'It is almost impossible,' came the discouraging answer. 'It is to help that I have written this book. But it is so difficult. As children, we are influenced so much by environment and early impressions. We imitate those surrounding us, and as few adults are correctly co-ordinated the child is handicapped from the start. I came to the conclusion long ago that the inefficiency and discomfort so many people experience, leading them even to nervous breakdowns, can usually be attributed to faulty education in their childhood, when lack of knowledge of muscular processes, say writing in strained postures at desks, forced them into faulty habits which have had detrimental effects on the whole of their future lives.

'Then again, at school the child is so often trained wrongly. Physical and mental culture are treated in water-tight compartments, as two entirely separate things, which of course they are not. People will not realize how utterly inter-dependent they are, the brain to control the body, so that the improved body may stimulate the brain.

'And in our daily life. We laugh at the bustles our ancestors wore, yet see us to-day. Tailors fill up the shoulders of a man's coat until they have created absolutely square shoulders. They produce a stiff and unnatural military-inspired posture that has nothing in common with the healthy, flexible body of a young animal.'

**Just What is Wrong With Us**

'How does correct muscular control improve a person's ability and affect his outlook?' I asked.

'Why, it means the difference between success and failure, between happiness and
despondency. I cannot sufficiently stress its importance. The whole mental attitude changes. The brain becomes not only more energetic, alert, discriminating, but so much more confident. People who are shy, who lack faith in themselves, who suffer from what you call an inferiority complex, are so because they have no proper control of themselves. And in the case of so many, what were once just bad habits develop into serious illnesses. Neurosis, hysteria, nervous irritation menace the happiness of thousands.

‘On the other hand the co-ordinated person has all that assurance which means success. Take a good tennis player. He owes his excellence to the fact that he executes his strokes correctly and confidently. He could not do that unless his muscles were under the perfect control and command of his brain. Your uncertain, erratic player is without proper command, and so without confidence. I have had several of my own pupils tell me that the exercises I have given them in their pianoforte training have helped them to improve their golf. They find that they are more capable of controlling the swing of the club.

‘And you should see the confidence with which my pupils, even the youngest, sit down before a piano. A critical audience has no terrors for them. They know what they can do, and they go ahead and do it with assurance and ease. Stage fright is unknown to them. I teach them how to avoid all muscular strain, and so they suffer from no mental strain. In a word, they are fit. They get the best possible results out of the mind and body they have been given. Of how few people can one say that. So often there is such a little wrong. It could be put right so easily if people only understood, and realized the importance of—conscious muscular control.

‘I should like to help.’

As I shook hands with her on leaving, she laughed.

George Allen & Unwin Ltd.

New Treasure

A Study of the Psychology of Love

By The Earl of Lytton

Based on the principles of Homer Lane, author of Talks to Parents and Teachers and The Little Commonwealth, this book is a short study of the Psychology of The Religion of Love. Lord Lytton outlines the 15 Articles which should constitute The Religion of Love, and gives a most interesting modern interpretation of the Beatitudes.

‘You shouldn’t hold yourself like that,’ she said. ‘Don’t hunch your shoulders back and up. In your position you are strained and uncomfortable. I hope you don’t mind my telling you that.’

I should have—but for the ninety-eight per cent.

I left Madame Levinskaya, convinced that I had never met any one who so embodied her own principles as she does. Her confidence and poise are superb. She knows what she is talking about, and what she talks about is worth while.

Her indictment of the physical training given to children in this country might well be given a little attention. And for the rest: ‘How few are aware of their own potentialities,’ she says. The argument that the most important part of our education should be concerned with our health—healthy preparation for the life-work ahead—is a novel presentation of the case to most of us.

It bears looking into.
The writer of this article, who is a parent as well as a teacher, tells how she makes herself responsible for the complete education of her children who are brought up entirely at home. Many interesting questions are raised by this article. Are the advantages of this type of upbringing sufficient to compensate for the lack of companionship with other boys and girls provided by school life? How far is it an adequate preparation for school and adult life in which so many adjustments have to be made to people of different types? Can it develop the social side of the child's character sufficiently? The Editor will welcome correspondence on these points.

By the time my son Edward, now nine, has grown up, the complexity of the age will have increased, and in bringing him up, I try to keep in mind a threefold purpose: he must be equipped to earn his livelihood, enabled to know himself and be at peace with his own mind and able to make those personal adjustments which are necessary if he is to conduct his social relationships successfully. There must therefore be training of all sides of his nature, physical, mental, moral, emotional. And these are so interlocked that their guidance should be under the supervision of one person. That is why I have not sent him to school but teach him at home with his sister who is fourteen months younger.

Making the Routine Fit the Child

I attach the greatest possible importance to the care of physical health; yet I think this care must be given without the child being unduly aware of it. When Edward was very young, I began to teach him the elements of physiology, of biology and hygiene; and I have deputed to him very gradually the responsibility for little matters relating to his own health, making sure that one responsibility was fully assumed before another was added. Such training has to be given very tactfully as I certainly do not want him to become a faddist or unduly pre-occupied with himself. A child's reaction to any kind of fussiness is, however, his own safeguard against this.

I think diet plays a greater part than is usually realized in the development of all sides of a child's personality; my experiments have led me to believe that many tendencies, mental, moral and emotional, as well as physical, can be modified by dietary adjustments, and unsuspected qualities developed thereby.

With regard to matters of rest, bathing, fresh air, exercise and especially sun bathing, the best results cannot be obtained by following a general rule laid down for a large number. The regime must be adapted to the particular requirements of the child concerned. For instance, Edward has strong creative impulses, and there have been occasions, particularly when he was younger, when, if he had anything big of this kind on hand, much in the way of physical exertion, such as walking or games, would have been quite beyond him. At the same time, it would have been quite useless to send him to bed until his problem was solved. In a very young child the practical application of an idea must follow immediately on the inspiration. To insist on a routine at such a time would be to thwart the creative
impulse. As the child grows older the inspiration can be held in mind, without diminishing, for gradually lengthening periods, and there is less need to modify the daily routine: but this kind of adaptation can only be satisfactorily made where the whole of the child’s day is under the supervision of one person.

Developing the Child’s Creative Impulse

It has not been altogether easy to combine the fostering of this valuable creative instinct with the necessary training in the disciplinary side of life. I have tried to do this in lessons by approaching different subjects in an entirely different manner. In my view there is only one way to learn tables or spelling, or handwriting, and that is by practice, however drudging it may seem. In group work, such as physical exercises, playground games, etc., it is of value to learn to obey sharply on the word of command. But there is another field of education, which includes history, geography, art, music, etc., where I decry any attempt to teach facts. In these, the grasping of a principle, or the expression of a creative impulse is what matters.

I have never given a history or geography or similar lesson without having at hand plasticine, wax or drawing materials, so that the children may do something that the lesson has inspired them to do (not something I have set them to do). There has been no lack of inspiration and no display of self-consciousness. Sometimes the interest of the lesson is carried through into playtime. For instance, Edward spent the whole of one afternoon’s playtime drawing a huge circular map of the world on the schoolroom floor, with shipping routes marked out and little wax ships entering the harbours.

Play is the second factor which I regard as of immense importance in a training which aims at the fullest possible development of the personality. By this I do not mean organized games, but rather a continuation of the kind of play, which is normally expected in a child of five.

Learning through Play

The regime of most schools is such that, taking account of the time devoted to meals, lessons, school games, necessary rest and personal hygiene and possibly the walk to and from school, there is very little time left for this kind of play. Yet in the life of a child over seven or eight, it is most essential, particularly to a boy. For in his individual play a boy plays at life itself and learns more of real value than the best teacher in the world can impart. Companionship in play is very important and always on two or three afternoons a week we have children to the house or visit them.

I believe in giving children the fullest possible freedom in their play. Our children have the sunniest room in the house as a combined playroom and schoolroom; they keep their personal possessions separate and have a cupboard for shared things. There is a gramophone for their own use; they take as much delight in the music from some of the operas as they do in the more catchy popular dance tunes. The centre of the floor is bare and they are often to be seen inventing dance steps. All kinds of materials are at hand, such as gum, coloured paper, cardboard, plasticine, wire, wood, tools. Muriel can indulge to her heart’s content her passion for painting and Edward his fondness for making model aeroplanes.

In the garden there is a sand heap, a swing, the usual wheel toys, and a playhouse which the children built with their father two years ago.
ago. In it they give children's parties, arranging the menus, buying the food and preparing the meal. Once a week they clean the house and after the holidays they are going to repaint it. It is furnished with chairs they have seat themselves with rush, and furniture they have stained. All this satisfies a child's longing to feel important and fosters a sense of responsibility which is all too rare to-day. At the top of the house, there is a room where a large toy railway is set out and another with mattresses for gymnastics, a balancing beam, balls and skipping ropes.

**Preserving the Urge to Find Out**

A COMPANIONSHIP IN PLAY is necessary, but competition in lessons very often kills the desire to learn which nearly every young child possesses. Sometimes it breeds an inferiority complex which handicaps a child for life, or a spirit of unwarranted pride which is just as damaging. My boy has kept the absorbing curiosity which is so often killed in early school years by dull methods of work, or by trying to go at the pace of others. He has a constant itch to learn; and in those lessons such as dancing, physical exercises, games, singing and dramatic work, where co-operation is valuable, he has the companionship of his sister. The only legitimate form of competition in work is with one's own earlier achievements.

**Moral and Emotional Training**

I believe that in moral and emotional training, there is always a right moment at which to interfere. As a small boy, gifted with great moral courage and mental honesty, Edward was yet very cautious physically. He hesitated to sit on the swing or go in the sea and I can picture him now, crouched in apprehension on the first seaside pony he rode. The right procedure seems to me to be to wait for the psychological moment and then give the necessary push to show the child that his doubts were unfounded. If I had tried to give the push too late it would have been ineffective, if too early, harm to the nervous system or mental processes might have resulted. I found the right moment, however, and Edward is now fond of the swing, goes to the swimming baths regularly and shows signs of being a strong swimmer; and when there was an opportunity for riding lessons, he soon outstripped his sister who never had any fear of any animal that breathed.

I have applied somewhat the same principle in the teaching of good manners. Like all small boys of a very thoughtful type, my son was much too deeply pre-occupied with his own affairs to take much notice of other people. But the time has come now when he has begun to show interest in others and in their comfort, likes and dislikes. Under the influence of guidance and encouragement given at the right time he is developing considerable charm of manner and a real feeling of friendliness to others. Had I insisted on an outward show of conventional politeness too early I should have induced a condition in which he was seemingly polite, but harbouring mental reservations without developing any true graciousness towards others.

**Social Training**

THIS TRAINING in sociability is part of a plan in which I intend to introduce him gradually to
larger and larger social groups. I shall so grade it that there will be time and opportunity to discuss the occasions on which he must adjust himself to the group and those on which it would be unwise to modify his own standard of conduct, and also to consider the motives of others and reasons for their conduct. I hope this will save him both time and mistakes later in life.

I try to give all mental, moral, or emotional training impersonally. I do believe strongly that if I am to develop in my son a free soul, with mental clarity, moral courage and a capacity for strong independent action combined with friendliness I must keep the personal element and all emotionalism as far as possible out of my teachings. More personal methods are sometimes successful, but there is too much danger that they will produce in maturity a desire to please at the expense of good judgment; a tendency to take hard words too much to heart, and possibly a feeling of inadequacy, which will greatly hamper success.

Strange as it may seem, there is no surer way of retaining a child’s confidence than this impersonal method of approach to problems which can so easily be associated in the child’s mind with strong emotional feeling. It will be apparent to any one who understands children that my methods of training would be completely ineffective had not I, and their father, the children’s entire confidence.

Sex Teaching

No remarks on child-training are adequate to-day without some reference to sex-education. I have neither withheld knowledge, nor have I forced it. I have answered questions when they have been asked, even in babyhood: but I have only given the information asked for. I found that satisfied and that months would elapse before further interest was shown, and fuller information required. I have given this in as impersonal a way as possible and in as scientific a way as the child could appreciate. Later in the biology course of lessons, which I have given, the complete facts of motherhood and fatherhood both in the vegetable and animal kingdoms have been presented along with other knowledge of the body which it is interesting and useful to have.
December 1934

A PARENT’S ADVENTURE IN EDUCATION

It might seem that children trained along these lines would show signs of being ‘tied to mother’s apron strings.’ This is not the case. Although I supervise every detail of their lives, they are not made unduly aware of this. They are able to hold their own and play happily with children of various ages and classes. They give no trouble to the maid in charge when I leave them at home, and if invited away from home for a holiday without me, they go happily and enjoy it.

Speaking broadly, I have not looked for perfection. I don’t expect adult behaviour from a child whose age implies, after all, that he is only a partially developed human being. I am satisfied if, as the months go by, there is a gradual improvement towards adult standards. When I send my son to school at the age of 10 or 11, if I can feel that he still retains his absorbing curiosity and his power to teach himself; if his intellectual and moral honesty are still unimpaired, if he can hold an even balance between strong independent action and friendliness with his fellows, and if his physical health is still as good as to-day, I shall feel that he is ready to meet whatever life may bring of good or bad fortune.

THE LIFE OF AN EDUCATIONAL WORKER

(HENRIETTA BUSK)

Compiled by Ruth Young

WITH ILLUSTRATIONS

3s. 6d. net

IN a foreword contributed by Sir Michael Sadler this book is described as “a tonic book. Miss Young’s narrative is a framed canvas on which Miss HENRIETTA BUSK has herself delineated a self-portrait.” Incidentally, the book deals with developments in English education during the past ninety years.

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Your Mind and Mine. Raymond B. Cattell. (Harrap, 7s. 6d.)

Why does Dr. Cattell like to poke fun at medical men? Why does he sometimes seem to slight philosophers? Has this slighting of philosophers the same root as his seeming dislike of 'academic' psychologists? What repressions has he himself got from stupid adults? before he was 'old enough to have any say in the matter'? What are his views on religion, on marriage?

These questions are provoked because Dr. Cattell succeeds so well in his aim to provide a survey of psychology for the inquiring layman. It is part of the evidence of his success that the inquiring layman, having inquired sufficiently to read the book, goes on to inquire about the psychological make-up of the author.

Dr. Cattell's method is to present his subject with some regard to its historical setting and to interwine with it some account of the personalities of the men who have contributed work to its development. The book has many stimulating paragraphs and penetrating phrases. There are, too, some good stories to entertain the reader at intervals. The attractive cover is a foretaste of many excellent illustrations and diagrams. Dr. Cattell's chief danger is a tendency to discursiveness (e.g. 'in gay pre-War Vienna, city of careless joys and bitter tragedies, Freud was struggling,' etc.) and occasional inability to resist the familiar quotation. Another danger, to which Dr. Cattell sometimes succumbs, is a certain looseness in the use of terms. What, for example, is 'a sensation of unshed tears'? These, however, are minor points.

Dr. Cattell plunges into the modern heart of his subject and devotes only a single paragraph to the background of Plato, Aristotle, the Middle Ages (during which, it is summarily stated, the mind was just something to be hit with a battle-axe) and the philosophers generally. From the search for mind in the nervous system, he proceeds to discuss intelligence, passion and impulse, the architecture of character, the body-mind relationship, and he concludes, in the thirteenth chapter, with a survey of psychology as applied to education, vocational guidance, industry, factories and police-courts. The chapter heading promises us some account of psychology as applied in the Houses of Parliament, but, for discussion of the bigger social questions, we are referred to Dr. Cattell's earlier book 'Psychology and Social Progress.'

The present volume will be read to the end by all who begin it. Dr. Cattell's hero-worship of the great figures in psychology is infectious and the inquiring layman will want to learn more about their work in this subject. Teachers and parents will find a stimulating basis and background for further study.

J. Kilgour.


A new book by Bertrand Russell, on whatever subject he writes is always an event. One of the few great literary stylists of contemporary Europe, and one of its keenest minds, he is incapable of writing a volume or pamphlet that is not full of happy sayings and brilliant aperçus. But this, unfortunately, is not a great book in spite of its 500 pages. It can best be described as a medley—a medley of political and economic theory, social and political history, and personal anecdote, written in a racy and attractive style, alas! too often reminiscent of the popular platform.

The author tells us in his preface that his purpose is to trace the main causes of political change during the hundred years between 1814 and 1914. He considers that there are three causes—economic technique, political theory, and important individuals. The part played by individuals he believes to be unduly minimized by many political thinkers to-day. This accounts perhaps for much of the special attraction of the book for the layman, since we are given a series of thumbnail sketches of the views, characters and achievements of the most important political figures of the last century from Metternich, Talleyrand, Owen and Cobden to Marx, Lincoln, Bismarck and Rhodes. These portraits are mostly drawn in the fashionable 'debunking' spirit and often read like contemporary caricature. For instance, of Bismarck in his relations with Napoleon III: he writes: 'Both he and Napoleon were rogues, but one was as clever as the other was silly'. Whatever one may think of the two personalities 'rogue' is a word that can only be applied to them by one who is determined to belittle at all costs. It is a relief to return from such remarks to the chapters which illuminate the deeper purpose—a purpose which really constitutes the unifying element in what would otherwise often seem a nightmare medley. It is summarized in the last two sentences of the volume: 'The same causes that produced war in 1914 are still operative, and, unless checked by international control of investment and of raw material, they will inevitably produce the same effect, but on a larger scale. It is not by pacifist sentiment, but by world-wide economic organization, that civilized mankind is to be saved from collective suicide.'

Art as Experience. John Dewey. (Allen & Unwin, 16s.)

Professor Dewey's object, in his latest book, is to show that art is, or should be, a distinct part of every man's pleasure and experience. He explores the meaning and importance of the several fine arts: the enduring record of architecture; the vivid, arrested movement of sculpture; the ever-changing vision of painting; the strangely confused appeal of music, and the value of literature—of poetry and
prose—as the most constant yet most changeable medium of expression. He shows what can commonly be appreciated in all the arts; what are their various intrinsic qualities, but all this is but the necessary adjunct to his demonstration of the true meaning of aesthetic experience. The difficulty to the layman in

emotional from the intellectual, sensual pleasure

aesthetic experience. The difficulty to the layman in

prose

as the most constant yet most changeable

—

He explains why art has been placed on a false, isolated pedestal. False, because art is 'the refined and intensified form of what is universally regarded as experience—the happenings and sufferings of everyday life'. This book correlates the two forms of experience. And it is a book that anyone who wishes to see the fullest meaning in life must appreciate, for while it explains art as experience, it explains the meaning of experience itself, which is Professor Dewey's philosophy. — D. G. Cleage.

Chalk and Cheese. Richard Vaughan. (John Miles, Ltd., London 1934, 7s. 6d.)

Among Modern Schools the principle of co-
education is becoming well established. Yet there are many parents who, in seeking for the more enlightened methods of education, have doubts about the wisdom of boys and girls living and working together up to University age. This book will not set

their fears at rest. Yet it is a serious contribution in the form of a novel, to the problem of boy and girl friendships. Are grown-ups, their parents and teachers, to look upon these with suspicion or as a normal and healthy part of adolescent growth?

The title is not very illuminating. From the wrapper it would appear that the boy is chalk and the girl cheese—not very complimentary to either. However, once the reader has got past the title page, he will be absorbed in the story of the boy's reactions and feelings in a mixed community. His struggles to adjust his ideas in a school where there are no rules, where the girls are frankly outspoken, where he can no longer rely on external authority to guide him along the straight path, are a wise commentary on the influence of over-severe discipline. His falling in love with an American girl who is a staunch upholder of the Stetzheim principles does not make things any easier. But it does form the stimulus to the opening out and strengthening of his character. The author reveals this clash of boy and girl temperaments with great insight and a most sensitive realization of the situation. Out of freedom comes first bewilderment, then strength.

The timidly inclined will shudder at the lack of restrictions which Stetzheim permits in the relations between boy and girl. Freedom from restraint implies trust in human nature; and at Stetzheim they believed that it was only in an atmosphere free from suspicion, that adolescent youth could grow into fuller understanding—understanding of self and of the oppositesex.

In a book cast in novel form we shall not expect a balanced account of all sides of life at a co-educational school. But the story is told with great delicacy and insight. It avoids being sentimental, as it has a serious purpose in the unfolding of character of Orleigh and Anne. Many readers will find it difficult to believe that a school can exist where such things can happen, and where there can be such freedom and trust between staff and children. Extreme it may be, but impossible, no. The original of this continental school is not difficult to recognize.

Mr. Vaughan has done a service to those who want to face the facts of a rapidly changing educational world. He has described the clash of tradition with the ultra modern with great psychological understanding. Perhaps his own views are given on the last page, in the thoughts of Orleigh as the train takes him on his final journey from Stetzheim: "I went to extremes—they all go to extremes—as different as chalk and cheese. Why not compromise, it could do no harm . . . ?"— B. L. Gimson.

Books Received

Sketching and Painting for Beginners Young and Old. D. D. Sawyer, with a Foreword by Lord Baden-Powell. (B. T. Batsford Ltd. 1s. 6d.)

Worlds in the Making. R. Barnard Way. (The Chatterbox Co. Ltd. 1s. 6d.)

A List of Plays for Men and Boys. Compiled by The British Drama League. (Nelson. 1s.)

Nine New Plays for Children. Rose Fyleman. (Nelson, The 'Little Theatre' Series. 3s. 6d.)

Mimes and Miming. Isabel Chisman and Gladys Wiles. (Nelson. 2s. 6d.)

The Works of William Shakespeare, gathered into One Volume. (Published by Basil Blackwell at 6s.)

The Book of Speed. With contributions by Sir Malcolm Campbell, Stephen King-Hall, Flight-Lt. Stainforth, Col. Etherton, G. E. T. Eyston, etc. (B. T. Batsford. 5s.)

The Story of Edward (in word and picture) by John Weir. (Methuen.)

Jill's Magic Island and Other Stories. Ernest A. Jelf. (Nelson. 7s. 6d.)

What Can We Do Now? Rodney Bennett. (Nelson. 3s. 6d.)
Nursery Schools in Italy. The Problem of Infant Education, by Giuseppe Lombardo-Radice. Translated by M. C. Glasgow. Introduction by Dr. Susan Isaacs. (George Allen & Unwin, Ltd. £6. net.)

This volume, which is full of good things, describes in some detail the work of two nursery schools in Italy—one at Monpiano, the other at Portomaggiore. There are two distinct threads running throughout the description; one, the account of the schools themselves, the other, Professor Lombardo-Radice’s helpful comments. It is claimed that the school of Signorina Agazzi at Monpiano was established long before either Madame Montessori in Italy or Margaret McMillan in England began their work. There seems to be little doubt that this publication is intended to establish that claim. Professor Lombardo-Radice speaks of the Agazzi ‘method’, but is careful to point out that Signorina Agazzi was not so hidebound as to prescribe once and for all what is necessary and sufficient. Nor has he any great regard for the scientific method. ‘I think’, he says, ‘scientific method often becomes a disease with purely theoretical educationists’. Again, he writes, ‘The world is full of riches: why make it seem poor by shutting the child up among the intricacies of a standardized apparatus’. References of this kind abound. They are made, however, in order to emphasize, by contrast, the Agazzi method of which the book contains numerous illustrations. It is a powerful plea for education through natural play. Anyone interested in the work of infants and nursery schools will do well to read the book.

My England. George Lansbury. Pp. 254. (Selwyn & Blount. 7s. 6d.)

Mr. Lansbury is not first and foremost an educationist, and, to be quite fair to him, he does not pose as one. He is the prophet, so to speak, of the National Labour Party. In this volume he sets out his ideas of what he would like the England of the future to be. It is obvious that, in attempting to describe the England of his dreams, and how he would plan it, he could not possibly omit some reference to education. It is true the reference to education, like much else in this volume, is meagre and perhaps a little vague, but it is interesting in that it consists of a whole-hearted tribute to teachers and their great work, and a suggestion as to what, in his scheme of things, the school of the future should aim at being.

With neither of these can the most meticulous reader have the slightest quarrel; on the contrary, Mr. Lansbury says again what New Educators have always been saying. ‘It is simply miraculous’, he writes (p. 226), ‘how much brightness and colour our teachers bring into the life of the schools . . . no one who knows and understands our day and evening schools, secondary and senior evening centres, will deny that the very best part of school life is those extras which teachers themselves supply. Music and dancing, drama and singing, football and netball, cricket and hockey, swimming and tennis, and indeed every sport and game young England should be heir to. A new England will do all these things much better. I do not mean that we can have a better spirit or more enthusiasm, but there will be more time and money for developing joy in life as part of our educational curriculum’. At the same time, Mr. Lansbury is not desirous of too much organization. ‘Often’, he says, ‘I think it is best to leave children alone to find their amusements and occupation.’ This, or something like it, is what modern educational experts are now beginning to say.

About existing school buildings Mr. Lansbury writes with severity. ‘In the preparations for a new England one of the most important things will be to pull down about two-thirds of the existing schools. Some of them are so unfit for their purpose as to be material for the Inspector of Nuisances . . . their places (should be) taken by airy, large-windowed buildings which will be more of the bungalow than the church and prison type. Incidentally, . . . the schools would automatically supply one good, well-cooked meal in the middle of the day for every child.’ (p. 25)

Disagree with the author as much as we will about his political philosophy, he shows in this book that he has given a great deal of thought to his scheme, and for this reason the volume is well worth reading.

A. J. L.

The ABC of Biology. C. M. Yonge, D.Sc. (Kegan Paul, 4s. 6d.)

In this book Professor Yonge gives a comprehensive survey of biological investigation and thought during the past years. The distinctions between animate and inanimate forms together with the dependence of life on certain physical processes are first discussed. An analysis of various organisms is then given, and the various mechanisms of life, transport in the body, energy output, reproduction, etc., are fully dealt with. The importance of the organism as a unit and the correlation necessary between its various parts form the basis of the third chapter, and is followed by an outline of the main theories of evolution and the support they receive from modern scientific investigations in geology, paleontology, embryology, etc. The fourth chapter deals with the interrelation and interdependence of various organisms and concludes with a brief outline of the main trend of modern biological thought.

To the serious student of biology this book should prove a mine of concentrated information. It is clearly and concisely written and connects many isolated biological facts and theories into a coherent whole.

It should prove no less interesting to those whose scientific knowledge is small. The language is for the most part non-technical, and Professor Yonge’s fluent and attractive style can be easily comprehended. For those who are unacquainted with elementary biological facts, however, this book should be taken in small doses or they may find themselves overwhelmed by the amount of knowledge concentrated in a small space.

One feels quite in agreement with the author’s own statement: ‘Of what should one write better than of the things which interest one most?’

Marjorie Knott

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