

FORUM

for the discussion of
NEW TRENDS IN EDUCATION
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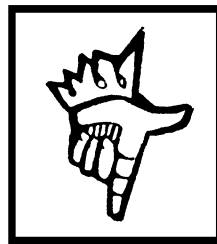
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Inside the Schools

SINCE THE LAST issue of FORUM, several local authorities have taken preliminary steps towards secondary school reorganisation. Of these the most radical plan is probably that of Derbyshire, which envisages a transformation through the development both of the fully comprehensive school (11 to 18) and of the end-on system, with a break at 14 or 15. Stoke-on-Trent, Manchester, Rotherham, Carlisle, the West Riding and other authorities have announced or are discussing similar plans, while Leicestershire proposes to extend its experimental area to three other parts of the county.

This increasing momentum towards new forms of secondary education makes a revaluation of purposes more than ever urgent. The only reason for changing the structure of the school system is that it widens opportunity and, in particular, makes possible an improvement in the quality of education. No one should be content with a purely administrative change; what matters most is what happens inside the schools themselves.

It is with this aspect of current changes that FORUM is most deeply concerned. While continuing our survey of new developments in organisation—this time of the West Midlands area—and including an article on contemporary controversies in the U.S.A. which have a certain relevance to British problems, the bulk of this issue is devoted to problems and experiences inside the schools.

The reforms in primary and secondary education permit increasing emphasis on what may be called the education of the average child—the title, incidentally of a forthcoming book by Mr. A. W. Rowe, around which we are arranging a symposium for our next number. It is now recognised that both normal children and those categorised as backward are a great deal more educable than was previously thought. The problem here is partly one of re-establishing

the child's confidence in his own ability; and Mrs. Partington's article on her experiences with a backward class in a comprehensive school throws light on the importance of this approach.

But this, of course, is not all; there is also the question of teaching method and purposes. Two articles deal with a fundamental issue here—that of the role of language in mental development. If the approach indicated both by Professor Lewis and in Mr. Fisher's review of Professor Luria's book becomes generally accepted it should be possible to tackle the phenomenon of backwardness at its roots.

The education of the average child involves also the development of new techniques, especially in the teaching of science. For this reason Mr. Shield had been invited to describe his new microscope, now generally available. Because of its cheapness, small size and simplicity, every child in a class can be equipped with this instrument, and so pursue his own studies of microscopic phenomena. This should be of particular value in both junior and secondary schools.

The content of education and methods of teaching are not, of course, the only problems with which the schools are faced; there is also the question of school organisation, and especially that of pupil-teacher relations. We are glad to include an article by a housemaster in one of the Coventry schools on this method of ensuring a close contact and knowledge of each individual pupil in a large school.

Secondary reorganisation brings new freedom and opportunities to the junior schools. Two articles in this issue are concerned with the content of education at that stage, and more are planned. Readers may note that the Board of FORUM has been joined by two more junior school teachers—an earnest of our intention to have due regard to this vital sphere of education.

Experiences with a Backward Class

JUNE PARTINGTON

THIS IS PART of the story of a group of girls in a London comprehensive school as seen by their form mistress.

The beginning in 1953 was the usual September opening. The first years were assembled in new school uniform and were allocated to their form mistresses. It is the school policy for children to have continuity of form mistress throughout their school career as far as is practicable. There were 28 girls in I.P., all of whom were classified as "backward" according to I.Q. and attainment figures. They were all aware of this because their contemporaries in the school, former junior school companions, were to them "centrals" and "grammar marginals." This did not help a form mistress whose aim had been not to acknowledge the existence of 'paper damnation.'

The 11 plus had left its mark. To establish confidence was, therefore, the first priority. The initial step was to give the girls a feeling of their importance as a group by improving form discipline. This was achieved by rigid adherence to the mundane things of school life—to bells for registration, for instance, and neat school uniform—by allocating form jobs to all, having a contribution from each girl at the weekly form meeting and inspiring a feeling of joint responsibility for any crime or commendation. While ordinary form procedure had to be made significant in such ways, yet all this had to come naturally. Every member of the class was early made aware of the meaning of a comprehensive school, and that within it there was a chance for every girl to work and prove herself a valuable member of the school community.

Reading Ages

The general backwardness of the form is clearly seen from their reading ages which were Schonell tested at the beginning of the first term. These ranged from 6.1 to 9.3 years, with most of the class falling in the lower half of this register. They could neither read nor write fluently. Some could not even relate sounds to letters, and 'bus' was frequently written down as 'cat' or some other word memorised in the past.

The form mistress was responsible for the English, history and geography of the class. This was to allow the children time to progress in the basic skill of English and to feel secure. At first the usual "backward" methods of inducing reading were tried. There were happy little groups of vying 'dogs,' 'elephants' and 'bears' reading tales intended for the 'slow.' This did not last for more

than three weeks. These children would never have made progress unless they were expected from the very beginning to stretch their capabilities to the limit. *Wind in the Willows* was the first experiment. By using dramatic narrative reading and a wide range of 'voices' as a starting point, to stimulate their interest and to impress the general lines of the events of the story on them, I found that their concentration improved by leaps and bounds.

A Question of Confidence

Gradually they were persuaded to read too. Sometimes they read a line each, sometimes a paragraph. This sounds disjointed, but they worked to keep the spirit of the story going as briskly as possible and the passages were carefully selected for their reading. Many of them were extremely shy at first as they maintained that they could not read 'aloud.' But as the weeks went on they overcame their inhibitions. Once they had taken the plunge they were remarkably patient and helpful to their weaker brethren.

One exercise in observation was to announce a timed test on counting the number of recurring words in a passage. Another was to find words beginning with the same letter and containing the same number of letters. Often they were asked to prepare a chapter at home so that they would be able not only to read but to answer questions on the text. They all had dictionaries and were trained to use them from the beginning, even though the process might be painfully slow.

Bambi was the second book attempted. It was a great favourite and read very quickly because the vocabulary was much simpler than that of the former book. This increased their confidence considerably. *Chang* was one of the most successful books read because it appealed to the growing desire for adventure, romance and experience of people in lands far from their own.

By the end of their first year they read *David Copperfield* (boyhood section only). The B.B.C. Television serial which followed a year later was criticised by the class for having omitted a great deal that was good in the book. They joined the school library and were encouraged to read anything from *Treasure Island* to *Northanger Abbey*. Undoubtedly this extra reading, no matter how sporadic or suitable it may have been, assisted their general progress.

Every week a spelling test of 20 words, taken from the current novel, was given. A great chart with a complicated system of colouring marked each

individual's performances for the term. Over every week-end they wrote an essay. All the stock titles were used. In answer to "What I would like to be" one girl wrote most seriously on her ambition to pass her life as a door-mat! Early essays revealed a great deal about their backgrounds, which helped considerably in the daily round of coping with their problems and their work.

Early Progress

The form also spent a good deal of time in comprehending passages read out to them and then answering questions after this one hearing. They loved poetry and took pleasure in reciting poems of their own choice. They even wrote some blank and couplet verse of their own. Some very useful experiments were made, to the general satisfaction of all, with a tape-recorder which the school had on loan for a time. Every facet of this work had to be taken at a slow pace, and there were many trials and set-backs, but the class did form habits of work which remained and which served them well later on.

When they were again Schonell-tested, after a year and a quarter, their chronological ages ranged from 12 years to 13 years 3 months, and their reading ages from 8.5 to 13.3 years, with all but five about the 10.5 mark. These results, though not perfect, showed progress. At the end of the summer term of their second year they had an unprepared spelling test of 100 words, in company with another form classified as secondary modern. Their scores ranged from 93 to 27, those of the other form from 94 to 40; the average of the "backward" class was 56 and that of their contemporaries 66. This first public try-out of their powers greatly encouraged them.

A growing facility with words was assisted by a liking for history. They took notes and gave lectures on such subjects as Leonardo da Vinci, Columbus and Copernicus for which they had to do the research. They enjoyed illustrating their work, and were adept at searching newspapers and magazines for articles of historical interest. Again educational cunning had been used. Spelling was not corrected unless the words were historical ones. This had a definitely good psychological effect. History note books became a delight to see and the pride and joy of their owners. The girls knew they were doing the same work as the other forms and could discuss history with them on an equal footing. They knew that they took history examination papers similar to those taken by their friends and also that they were expected to write for $1\frac{1}{2}$ hours in the second and third year, and for $2\frac{1}{2}$ hours in the fourth year examinations.

By their fourth year the girls were ready to hold their own with anybody and were thrown headlong into the school's "basic and extra subjects" fourth year time-table, which allows 17 periods a week for

basic work on a form basis and 18 for subjects of special study which involve working in cross section groups. My form did not choose the easy way out. They filled their time-tables and between them covered all school courses offered to the fourth year. All chose to do extra mathematics, English and history, the first two because they felt they still needed additional help, the third because they liked the subject.

By this time too they were enjoying the Brontës, Shakespeare, *Gone with the Wind*, *War and Peace* and *The Virgin and the Gipsy*. They liked Dylan Thomas and developed a taste for acting and the Old Vic; John Neville's Hamlet and Laurence Olivier's Richard III moved them to tears.

There were now 32 girls in the class, 4 having joined from elsewhere in the school, and in this vital fourth year only two girls left at Christmas and six at Easter. This meant that the majority completed their fourth year, though many were well over 15. In their English examination at the end of the year, which they did in common with the nine other fourth year forms, their average mark was 44%, the highest individual attaining 74%. In their history examination, conducted similarly, their average was 41% and the highest individual mark 60%.

Parental Support

Life was not always straightforward and calm. There were outbursts of temper which gradually lessened. But emotional troubles, bad homes and ill-health dogged many of the class. Some had so much to contend with at home that they did not gain the full benefit from school. Others with very difficult backgrounds managed to overcome their great disadvantages. Close contact has always been maintained with the parents, and in only one case did the school not see the mother.

Many of the parents steadily supported the school parent-teacher association, which is very flourishing. On one occasion, at a meeting of over 200 people assembled to hear about school extra-mural activities, the girl who had begun in 1953 with the lowest reading age in the class gave an account of her work teaching children to read in a local hospital. Her mother was overjoyed, as, apparently, at one stage in her daughter's junior school career an E.S.N. school had been recommended. The girl gave an interview to the local press after the meeting as the reporter had been most impressed by her charm and interest in her voluntary work.

The class would be left out of nothing. School journeys, the school play, the school choir, C.E.W.C. conferences, school parties—they enjoyed them all. They were always willing to offer their services in the less glamorous spheres of washing-up after school functions and of prefects' duties. As they left school they followed the usual gamut of careers

FORUM

The Autumn Number, September, 1959

will include

Report from Yorkshire by ROBIN PEDLEY

A study of new developments in secondary education in Yorkshire, by a Yorkshireman.

The Education of the Average Child

A symposium, based on a forthcoming book by A. W. Rowe, at present head of The Margaret Tabor Secondary Boys' School, Essex, and until recently head of Holmer Green modern secondary school, Bucks. Mr. Rowe has pioneered a new approach to teaching, which he describes in this book.

Contributed by

PETER MAUGER, headmaster, Nightingale County Secondary School, Essex;

MARJORIE COOKE, headmistress, Priory Girls' Secondary Modern School, Middlesex;

PROFESSOR J. W. TIBBLE, Education Department, Leicester University.

Our Junior Partners by R. J. WILLIAMS, headmaster, Sandfields Comprehensive School, Port Talbot.

The abolition of selection and the establishment of comprehensive schools makes possible a true integration of primary and secondary schools. Mr. Williams describes new methods of co-operation between his own school and the junior schools in his area.

Children who are Backward by S. S. SEGAL, Hon. Secretary of the Guild of Teachers of Backward Children.

Recent advances in the teaching of backward children are arousing wide interest in the schools. The Guild of Teachers of Backward Children acts as a centre for the discussion and exchange of information on this question, and Mr. Segal utilises this experience in his article.

Field Studies in Secondary Education by J. WALTON, headmaster, Kingsway County Secondary Modern School, Nottinghamshire.

Until recently senior history master at Great Barr Comprehensive School, Birmingham, Mr. Walton draws on his considerable experience of organising field studies in different types of school and stresses their importance in bringing history to life.

Modern Languages in Non-Selective Schools

Can a modern language be usefully taught to all children? Should it be so taught? This question, which is coming more and more to the fore, will be discussed by Mr. Hands, head of the modern language department at Caludon Castle Comprehensive School, Coventry and by Miss Hopwood, assistant teacher at Greaves County Secondary School, Lancaster, both of whom teach French right through the school. Mr. Richardson, tutor in modern languages in the Education Department of Leicester University, is also contributing.

Other features include DISCUSSION, based on contributions sent in to the editors, and book reviews.

To the Manager, FORUM, 71 Clarendon Park Rd., Leicester

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for the average girl, ranging from clerical work, via junior designing for a well-known West End dress firm, to book-binding. One outspoken member, attending an interview for entry into the printing trade, asked the personnel officer, "Are the Factory Acts fully observed here?" They return to old girls' meetings full of news and looking the sensible, assured teenagers that they are. Many are planning holidays abroad, and one venturesome spirit is studying Italian at evening classes.

In the fifth year I had eleven girls, drawn from three former fourth year groups including my own, who followed the G.C.E. and general courses offered in the school; though one left at the end of the Christmas Term to embark upon a two-year course in hairdressing at a London Polytechnic where she is managing very well. All these eleven were school prefects and one was elected fifth form captain and senior fifth year prefect. Their examination successes were not outstanding but one girl whose reading age at eleven and a half was 8.2 years gained three passes at 'O' Level at the age of sixteen.

Three of the original class have just begun their sixth year and hope to continue their studies for some time. However, the school's aim with this class was not to gain examination successes but to produce happy, confident and responsible individuals who would be assets to any part of the community in which they live and work. This aim has, I believe, been accomplished, and these London girls, like others throughout the country, have helped to destroy the idea that early backwardness imposes some form of absolute or permanent limitation on future intellectual growth. Their school careers have helped to strengthen the principle on which comprehensive education is based; that within our young people are powers and possibilities as yet unrealised.

(Continued from page 87)

provision, at all stages, for active participation by the child; they allow various means of recording information; they encourage exploration down side avenues. Nevertheless they know that each subject has its own discipline, its own language, mode of thought and methods of procedure, its own authority. They know that in a few years their children will be studying subjects as such at secondary schools. They, therefore, want to lay sure foundations. They want their children to make those experiments and observations, amass those facts, read and write about those things which, rather undifferentiated though they may be at junior level, become the matrix from which subjects emerge and are seen to emerge by the children at secondary level.

General Subjects in the Junior School

F. G. RICKARD

THE CURRICULUM of the junior school has been under constant discussion since 1931 at least, but no part of it has been subjected to such fierce criticism as General Subjects. The aims behind subject teaching have been raised again and again, the question of teaching subjects or creating some integrated scheme continuously debated, methods and content have become the source of fundamental disagreement. Whether or not there is now any real consensus of opinion among junior teachers is open to question.

The Place of History

Let us start with history, concerning the teaching of which there is more disagreement than ever. I must restrict my comments here to the barest minimum because this subject is to be more fully dealt with by FORUM in a later issue. I must, however, draw attention to some divergent points of view.

Many make a sociological claim for history. The primary social function of education, we are informed, is the transmission of the community's cultural heritage from one generation to another. History is the ideal tool for the job. The subject is, in fact, a constant element in the educational systems of all societies. Starting from different premises and relying on sources as different as Lecky and Dr. Keatinge, others claim that only history enables a child to understand the environment into which he is born. This approach is vigorously attacked on philosophical and psychological grounds; not least, of course, by the disciples of Croce and Gentile.

Elsewhere history is taught because it provides an elementary training in citizenship, because it fosters patriotism or internationalism, or because it provides a background for other subjects. I put these aims together because, while they are all to some degree quite proper, they all demand a selection of historical facts which usually makes nonsense of the real nature of history.

Some teachers consider that the past has a value in itself. Upholders of the "patch" approach, for instance, want history to help children to "get under the skin of a previous age," "to find out how others lived," to "awaken a child's imaginative wonder and excitement." As many other subjects have also become imaginative experiences some teachers are wondering if we have not reached a stage where the primary curriculum is in danger of being overburdened with such experiences to the exclusion of others no less rewarding.

Once it was fashionable to use history as a basis for ethical or moral instruction, or, at an elementary level, as a course in applied psychology. This is sometimes still done but it is true, I think, to say that today teachers are increasingly wary of pointing the moral.

Likewise it was common to use history as a means of developing the faculties. And teachers can still be heard claiming that history broadens the mind, extends the sympathy, enlarges the personality, encourages an analytical mode of thought, awakens interest, satisfies curiosity, etc., etc.

History, well taught, can do all these things; but, then, so can many other subjects. Why, therefore, teach history?

Being placed in this position, teachers, wishing to justify the teaching of history, are tending to fall back on what is regarded as the unique contribution of the subject. (The same is true of geography and science.) This contribution is twofold. Firstly, the subject gives the child the idea of historical or evolutionary development. Secondly, a study of such development gives the child the idea of historical method. Neither of these ideas is beyond the comprehension of junior children.

Multiplicity of aims leads to multiplicity of methods. Thus we have the straightforward chronological approach, Ranke's "Wie es eigentlich gewesen," the concentric method, the "patch" or "period in depth" method, the biographical method, the "line of development" method, the tracing backwards "from me here now," the project or theme, the individual topic based on children's individual interests. Methods of work and of recording information are just as various.

Geographical Studies

In the field of geographical studies there seems to be more agreement on content and methods, if not on objectives. Thus we find in a large percentage of schools some scheme embracing studies of the child's "home," school, neighbourhood, town or county. Then there is probably provision for some work on the British Isles and, to a greater or lesser extent, on countries overseas. The link or theme may be a human one, i.e. the study of different peoples in different environments, or a map one, i.e. the study of increasingly complicated plans, charts and maps. Broadly speaking, the geography is regional and human.

The most popular defence of geography teaching is that it enables a child to understand his immediate

environment and, in part at least, the assets and problems of his region or country. And to this may be added the educational, social and emotional value of a child actively exploring that environment with his peers.

There are, however, other reasons advanced for the teaching of geography. Thus, a case is frequently made for the teaching of geography as a training in good citizenship. Others take it further and use it as a training in world citizenship. "Geography helps the child to regard himself as a unit in a great family." To them geography is the great humane and liberalising study.

For some, geography is a scientific study giving a training in scientific thought and methods; and, it seems to me, a good case is often made along these lines. The theme is, however, dangerously pursued by those who hold that geography develops a child's critical powers, encourages clear thinking, provides a good intellectual discipline, etc.

At this point it is only fair to mention that many teachers, notably Miss Garnett, regard geography both as a humanistic and as a scientific study, and their writings and practice have had a deep effect on our teaching.

A case is often made for geography as a "core" subject. "No event is without its geographical significance." "Geography ties all the other subjects together" and enables children better to understand our language, literature, history and art.

Here, however, we have reached the point of claiming for geography what has also been claimed for other subjects. So, once more, the unique contribution of geography is sought, laid bare and defended. In this connection one tends to think of Mackinder and Fairgrieve. It is they principally who have written of the specifically geographical method and mode of thought. Briefly, they claim that geography is important because it trains future citizens "to imagine accurately" the conditions of the great world stage; "to think visually with accuracy and readiness." As with history, it takes a skilled practitioner to bring out at junior level the essential contribution of the subject.

Nature Study

From many sources we hear complaints that mathematics is badly taught, that teachers do not know enough about the subject, that teachers are afraid of it, that, as they were badly taught, so they pass on their bad habits. It would, however, seem more appropriate to cite nature study. This subject which is so "right" for junior children, which cries out for a practical and imaginative approach is, more often than not, reduced to a sterile study, cribbed, cabined and confined by the four walls of the classroom.

Skilled teachers with a love of the subject know that there are many reasons for taking it seriously. They claim, and with some reason, that nature study provides an introduction to scientific thought and principles. It demands a vast range of observations, measurements and experiments. It has a deep and real significance in the way it illumines a child's growing understanding of his environment. It is an essential part of a child's aesthetic education. Again to many it is the "core" subject.

The Purpose of Science

About science I propose to say little since the amount of science teaching now taking place is quite meagre. The subject is, however, being pioneered at junior level. The work being done is interesting and appears to be on the right lines. How debased will the work and philosophy of these pioneers become once it is popularised? When one sees what popularisation and reduction to terms which all could understand has done to "activity" methods, one fears for science.

Science for junior children should have a dual purpose. It should develop a scientific attitude and an appreciation of the scientific method; it should demand the making of realistic experiments, training in close observation and in questioning one's sense experience. Stress must be laid on the fact that the accumulation of scientific facts is as valueless as the accumulation of inert ideas in any other field.

In the history of man's acquisition of knowledge one can look back to a time when all knowledge was virtually one. Today, however, the most significant fact about man's knowledge is its increasing proliferation into branches unknown and unnamed even 100 years ago. Nevertheless the links between subjects are obvious. How much history taught at primary level is really literature? How can one assign great voyages of discovery either to history or geography? How can one explain the flora and fauna of a region unless one knows something of climate and geology and knows what man has done to the landscape? How can one explain the landscape—and I am writing this in the centre of the Midland ridge and furrow countryside—unless one knows some history?

Is it not true that "all studies have a connection with one another and a certain affinity," "all knowledge is a seamless robe," or, as Comte put it. "all departments of our knowledge are really component parts of one and the same science, the science of humanity"?

Considerations such as these have led some primary schools to amalgamate, fuse, unite or integrate two, three, four or more subjects into "Environmental Studies," "General Studies," etc. Sometimes these labels cover a matrix out of which

separate subjects are expected to develop. Sometimes the development of separate subjects is not envisaged. Sometimes these labels cover a fairly traditional teaching of "subjects." Sometimes the integration is such that "subjects" are not apparent to teacher or child. The aims behind these courses are often those adduced in support of "subjects." Often other aims are consciously brought into play. For instance, children must see the unity of all knowledge; children's needs are more easily sub-served by the study of generalised knowledge rather than of separate subjects.

Subjects or Children

We started looking at subjects. We have now reached the children and their needs. Some claim that only the latter are important. We may, for simplicity, call these people the exponents of child centred education. They begin with some pretty clear conceptions about the child and his development. They attach to the child a great love of physical and mental activity, an interest in learning for learning's sake, a desire to collect things, to form groups and cliques, a tendency to weave fantasies around what they find in their environment, a love of play acting and of creating things, and an immense range of "interests." Children, they say, are naturally outward looking, display great curiosity, long to explore, have adventures and make discoveries.

These teachers, therefore, condemn purely academic education and mainly intellectual pursuits. They look for some scheme which will further a child's social and emotional as well as his intellectual education. They want much of the work to be practical. They desire active child participation in the choice and methods of study. They want children to learn how to learn. They want children to find out for themselves.

This frequently results in individual work on personally selected topics or group work on some project. Various branches of knowledge are, or are not, dealt with. It is possible, indeed, for a child to complete his junior school education without ever having systematically explored those parts of our knowledge which traditionally we label history, geography, nature study and science.

Subject or child? We have extremists at both ends of the scale. In between we have many floating voters. But, also, somewhere in the middle are those honestly engaged in seeking a compromise; and it is with them that the future lies. These teachers want a scheme of work which will embrace the child and the subject and treat them both with respect. They accept children's interests and use them to motivate their work; they deliberately make

(Continued on page 84)



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The House System in Coventry Comprehensive Schools

H. E. HOPPER

A KNOCK AT THE door of the housemaster's room—one of the regular succession at the day's appointed times.

"Come in!"

An adolescent boy enters—not a regular-attending sinner, not one of the likelier bearers of a chit of commendation; an ordinary, average boy, but looking a little more tensed than his wont.

"Sir, . . . I feel I ought to tell you that there's trouble at home."

Ought to tell you. Ought! That expression, even more than the information he brought, revealed the very essence of the relationship between housemaster and pupil. The Coventry comprehensive schools have been built, organised and staffed so that such intimate relationship can exist between housemaster or housemistress and any pupil in their house.

Coventry, educationally, is a fortunate city. Not only because of the grievous wounds of war-time, but also from its tremendous post-war increase in population—nearly 100,000 in the past twenty years—a great project of school building was necessary for both primary and secondary children. When a plan for comprehensive secondary schools was adopted, many of the obvious difficulties concerning buildings, adaptations, amalgamations, which have embarrassed authorities with similar ideas, were to some degree simplified. All but one of the comprehensive schools were to be in new buildings, constructed for their specific role. Spacious sites were chosen so that the schools would have "breathing space" within their own playing fields, lawns and flowering borders; Caludon Castle School occupies over 60 acres spanning the valley of the River Sowe; Woodlands School stands in 52 acres of land which had been a nature reserve. Seven comprehensive schools are already functioning, others are building or planned. And these schools were so designed that when completed each would contain 10 "houses," each house accommodating about 150 pupils in its own house building.

Differences between Schools

Acknowledging that these schools would be, in detail, experimental, the Coventry Education Committee imposed no fixed system of organisation; it

went further in its effort to gain the widest support from parents and to give them a measure of choice, by establishing single sex schools as well as co-educational ones; and in each school the head was free to develop the organisation which seemed desirable for it. Whitley Abbey School has separate houses for boys and girls; at Foxford School there are double houses for boys and girls, with senior staff of both sexes. The two boys' schools, Woodlands and Caludon Castle, also differ substantially; at Woodlands each house contains a complete cross section of the school in age and ability, except for the natural irregular proportion of sixth formers remaining in the different houses; at Caludon the 11+ entrants are placed in lower school houses for two years, before transfer to upper school houses for the remainder of their school careers. Although this arrangement is unusual among the different patterns of comprehensive schools throughout the country, it is extremely successful and meets certain problems without apparently raising others of a serious nature. Lyng Hall Girls' School is organised on a similar basis to Woodlands, but re-allocates sixth formers as necessary, to maintain throughout the houses an even age and ability balance.

Public School Parallel

It may be of interest, though some may dismiss it as frivolous, to note how close are some of the parallels between the organisation of the Coventry comprehensive schools and that of many of the nationally-known public schools. Both deal with large numbers of children, possessing a wide diversity of academic talent, and above all both place the utmost importance on the break-up of the larger number into the house unit, with its personal and warmer atmosphere; and in both cases the house is a visible entity, establishing its own individuality and tradition, not merely a convenient name. In both a pupil would invariably inform an enquirer not only of the name of his school, but automatically of the name of his particular house also, and already parents of new entrants to the comprehensive schools are requesting that their child should enter a certain house, by its name or by the name of its housemaster or housemistress. A further parallel occurs with Caludon Castle's transfer of pupils at 13+ from lower to upper school. Perhaps the proximity of Arnold's Rugby to the city of Coventry

has conditioned, possibly unwittingly, an educational pattern.

The responsibilities of the housemaster or housemistress, and their relationship with the rest of the house, differ according to the organisation of each school, to the hierarchy of command established there and to the personality of the head. How they exercise that responsibility depends upon themselves and the loyalty of their house staff. To the pupils in the house the housemaster/mistress must be their "guide, philosopher and friend." He, or she, is nearer to the pupil in an intimate unity of interest than the head of a large school can ever be, and at the same time appears as a more constant and authoritative symbol of the house than a form teacher. Good teachers in every kind of school can claim that they are "guide and friend," although usually without the same breadth of opportunity that the Coventry house system offers; few indeed will claim that they need to be philosopher so often, where each house contains the full range of academic ability, pupils with the highest aspirations and others devoid of real ambition, the enthusiasts and the rebels.

Contact and Knowledge

The housemaster ("housemistress" must be read into this wherever it can be applicable) has personal contact with every pupil in the house, and a reliable knowledge of the progress and attitude of each one. The amount of teaching the housemaster does in his own house depends on the individual school and on the subjects he offers; the Caludon organisation of lower school houses for the first two years, with all pupils following a general course, enables the housemaster to spend a very substantial part of his teaching time in and with his own house, and the pupils are taught within the house, except for subjects requiring specialist rooms or equipment, and as much as possible by their own house staff.

Contact and knowledge will come additionally from house assemblies, lunch in the house dining hall, reports from and daily mingling with the class teachers, control of discipline within the house, involving the daily procession to the housemaster's room of individual pupils bringing from members of staff commendations or requests for disciplinary action of some kind, personal requests of divers kinds from pupils and their parents, and sometimes confidences and appeals for guidance.

Pupils' behaviour and manners in and around the school, their general turn-out, personal appearance and practice of punctuality are all matters calling for the vigilance of the housemaster, and for which he, with the individual, holds part responsibility.

There are, too, the normal out-of-class opportunities for contact through games, clubs and societies, which operate on a house basis as well as at the greater level of the school; the evidence provided by pupils with initiative, and their supporters, by their participation in activities of a voluntary nature—working for a charity or helping some good cause. The house unit is sufficiently small for few activities or facets of character to pass unnoticed—in itself perhaps an answer to some of the less knowledgeable critics of comprehensive schools, whose criticism is from the outside, or a generalisation based on a single school or a single authority.

House prefect systems bring a rewarding contact between housemaster and a select band of pupils, provide a training ground for the holding of school office and a sifting machine for the discovery of real character. I recall Michael T., a boy originally in the lowest academic sets and not an outstanding games player or a "pusher," who was tried out as a house prefect. The judgment of the house staff was borne out when for two years he was selected form captain by his fellows in a form covering the full range of ability, and despite the presence there of another prefect who was in the top sets and house teams, a really fine and popular boy also. In a larger, less intimate unit a boy of Michael's quiet but sterling nature and influence would not have been easily noticed.

A Careers Master

The relationship between housemaster and pupil includes the liaison with the ancillary educational services of the local authority. Visits to the Child Guidance Centre, arrangements with the Welfare department, preparation of interviews with the Youth Employment Officer are within his sphere. Leavers must be anticipated and interviewed well in advance so that they may be helped, if necessary, when they meet the Youth Employment Officer—or he may be assisted by more detailed information about the leaver. Reference literature on careers, college and university entrance requirements must be collected or located within easy access, contact with local industries and individual firms established as widely as possible. Every housemaster must be in some measure a careers master, for he knows better than any other member of the staff the attainment, character and likely potential of each member of the house. The harder it is to place a leaver, the more the housemaster's help is required, sometimes to the extent of personal approaches to firms on behalf of really difficult cases, which can only be done where there is the greatest confidence, based on knowledge, of the housemaster in the pupil.

Contact with parents antedates the arrival of an entrant to a house, and continues until his or her career is settled. Parents of new entrants are

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invited to a meeting in the summer term—once the entry list is complete—and in Coventry the invitation is enthusiastically accepted. Thereafter house parents' meetings are called whenever there seems good reason—after the first half yearly reports have been received, before the transfer at the end of the second year from lower school to upper school house at Caludon, at the end of the third year when examination or specialist courses are being decided, and so on. The frequency of these meetings will depend upon the individual housemaster, and the attendance of parents on the importance to their child of the matter to be discussed. The private interviews which follow demonstrate the value placed on these meetings, especially when they have been known to go on to 11 p.m.—thanks to a tolerant caretaker. On some occasions private interviews without a general meeting prove a more suitable arrangement, as, for example, before the Youth Employment Officer's termly visit.

Parent and Child

The normal quota of school open days and the activities of Parent-Teacher Associations, especially where the double nomenclature is reflected in the membership and attendance, add to the contacts with parents. Some parents, as in all schools, prove elusive, but the number of meetings and their wide variety of purpose do bring in most parents on some occasion at least. There is no doubt about the mutual benefit gained; school, house, pupil, and parents too benefit from them. A housemaster's time must be freely spent, but the close partnership between pupil and senior house staff, begun in school, is often cemented by these meetings with parents.

There is no intention here to touch upon the broader issues affecting comprehensive schools. Recent publications have let much light into their organisation, work and aspirations in Coventry and elsewhere, and should do much to remove ill-formed criticism. Nor must this account be interpreted as an effort, by omission, to lessen the importance either of head teachers or of the other staff. The heads, still very much "captain of the ship," heads of departments and staff are often truly dedicated teachers, from whose vision and industry the schools feed. But the house system is an integral feature of Coventry's comprehensive schools, and the closeness and importance of the relationship between pupils and house staff, above all the housemaster or housemistress, cannot be over-stressed.

Report from the West Midlands

B. F. HOBBY⁽¹⁾

THE AREA HERE described is that part of the West Midlands where the three counties of Staffordshire, Warwickshire and Worcestershire merge and lose their identity in the great industrial wen of which Birmingham is the metropolis. In the industrial core of the region there are six local education authorities, Birmingham, Dudley, Smethwick, Walsall, West Bromwich and Wolverhampton; there are also two outliers, Coventry and Burton upon Trent.

The three Counties

The diversity of approach to problems of secondary school organisation which characterises present trends is neatly illustrated by the plans of these three counties. One envisages a county-wide change; another is to establish comprehensive schools in one area and bilateral schools in several others, while the third adheres to the tripartite theory.

Staffordshire is a county of bewildering variety and presents the administrator with a chaos of problems. Yet the 100 page revised development plan (April 1957) is a remarkable feat of tabulation from which emerges a clear picture of the aspirations of the education committee. One of these would appear to be a desire to establish coeducation in nearly all their secondary schools, for about 80% of them will eventually be mixed.

Just over a score of the existing grammar schools will be continued and about a third of them will be coeducational. But the authority is not enamoured of technical secondary schools and only three are to be provided—all mixed. A commercial school at Wednesbury is to be discontinued. What then of technical education at the secondary stage? It will be provided in a series of bilateral grammar/technical schools and in some modern/technical schools. Many of the other secondary schools will provide a variety of extended courses, and the plan, while already allowing for a degree of flexibility, does not preclude the possibility of further variation.

Staffordshire's distinctive contribution to comprehensive education is the establishment, during 1955-6, of three small comprehensive schools, deliberately planned for a five to seven-form entry and a total size of 750-900 pupils each. They are Tettenhall, Willenhall and Twidale. This policy challenges the general assumption that an efficient

comprehensive school must be roughly twice that size. These schools' achievements in advanced work will therefore be of the greatest importance. Willenhall, with an estimated future population of just over 40,000, is already planning for three additional schools of this type. As there is no grammar school in the town this scheme means that all secondary education in Willenhall will be comprehensive and coeducational, except, perhaps, for Roman Catholic pupils.

In a report to the Education Committee in January, 1956, the county education officer for *Warwickshire* suggested that the time had come for the authority to take a decision about shaping secondary education in the county for the future. We find, in this report, the argument that since there are almost infinite varieties of children fewer errors in selection will be made if they are sorted into two groups of equal standing rather than into tripartite divisions. Thus originated the idea of bipartite organisation with grammar schools and 'high schools' which was to become the policy of the authority. "It would accord with these lines of thought if the terms 'secondary technical' and 'secondary modern' were not used to describe any secondary school in the county and if schools of these kinds were known in future as High Schools."

This bipartite plan does not preclude the possibility of setting up comprehensive schools where there are no grammar schools and where the population is compact. Indeed, a comprehensive school is already in being in the only area in the county with a large population where there is no grammar school. Rather than break completely away from the earlier form of organisation the authority has decided to continue and extend the existing grammar schools and to build new ones, and to develop the high schools alongside them. "In the county a high school will, it is hoped, be a neighbourhood school. Such a school will supply all the needs in the district which it serves, and, as these needs are progressively met, will have fifth and sixth forms. In effect, the school will become the type of school its neighbourhood wants it to be. The main specialisation will differ from place to place . . ."

By January 1959 the county education officer was able to report that the education committee had given instructions that the date for designating as high schools all the secondary schools in the county (except grammar schools) should be advanced to 1st September 1959 and that they should be staffed and equipped accordingly. The plan will thus have been brought to fulfilment in three years.

⁽¹⁾ My thanks are due to the Chief Education Officers (or Directors of Education) of the counties of Staffordshire, Warwickshire, and Worcestershire, and of the county boroughs of Birmingham, Burton upon Trent and Dudley, for their kind assistance in providing material used in this article.

The county education officer has quite rightly said that the high school system advocated by the committee has attracted no little attention and the progress of the plan will undoubtedly be followed with great interest. Whether, given parity of staffing, equipment and facilities, the high schools will, in the long run, achieve parity of status with the grammar schools we shall have to wait a long time to learn, but we may well hope that the completion of the high school programme will indeed provide conditions in which no child has to suffer as a result of the selection examination. "For children to take their education as far as they can is not a favour to be conferred by selection; it is a right."

This bold scheme strikes a sharp blow at the concept of tripartitism. Happily, too, it steers clear of the menace of quadripartitism which is emerging in those areas where modern schools are divided into those which have extended courses and those which have not. The high schools would benefit greatly, however, if they could recruit a leavening of more gifted pupils, even if this meant a 5% reduction in the generous percentage of grammar school places.

Those who dwell in the county of *Worcestershire* need fear no such caperings. Let other authorities indulge in comprehensive schools and other new-fangled schemes, if they will, but as present policy in *Worcestershire* does not lie in this direction their merits or demerits need not engage our attention here.

Selection at 11 is implicitly championed in a report on the provision of secondary school places (January 1958). It is argued that although a small number of 'potential advanced level' candidates may be rejected at this stage, there is developing such a variety of opportunity in other types of secondary schools that they may, by transfer to grammar schools at 13, or to a college of further education at 15, or by taking a G.C.E. course in a modern secondary school, atone for their earlier failure.

In *Worcestershire* much experiment and development is taking place in modern secondary schools, designed to meet the needs of pupils remaining beyond their fifteenth birthday. It is by the extension and growth of courses leading to colleges of further education that lies the best hope of persuading more boys and girls to stay on for a full four years; "this is the most important next step in the development of secondary modern schools and will give purpose and aim to the last school year for children of average ability."

Still greater variety will be possible when the committee's plans for technical secondary education have been realised. At present nearly 4% of pupils are doing courses of a technical type but there is, in

addition, a considerable transfer of older pupils to technical secondary schools. "The fulfilment of the Committee's development plan will ultimately increase the technical secondary provision, either in separate schools or within other schools, to a figure approximating to 10%, and it will become available from the age of 11, and not, as happens in many cases at present, from the age of 13."

Strict adherence to tripartite theory leads almost inevitably to the establishment of technical secondary schools for children of the age of 11. It is difficult, however, to reconcile this policy with educational principles. In the first place it is doubtful whether any reliable tests are available for measuring technical aptitudes at such an early age, and however much deference is paid to parents' wishes they may be a most unsatisfactory guide in this matter. Further, the earliest aim of all secondary schools should be to give wide opportunities for social, cultural and academic development—to open many windows. Too early a stress upon purely vocational values is educationally undesirable. If it be argued that technical secondary schools fulfil these conditions, with a technical bias for some pupils in the later stages, well and good; but many grammar schools do likewise. It is high time that the question of nomenclature were reconsidered.

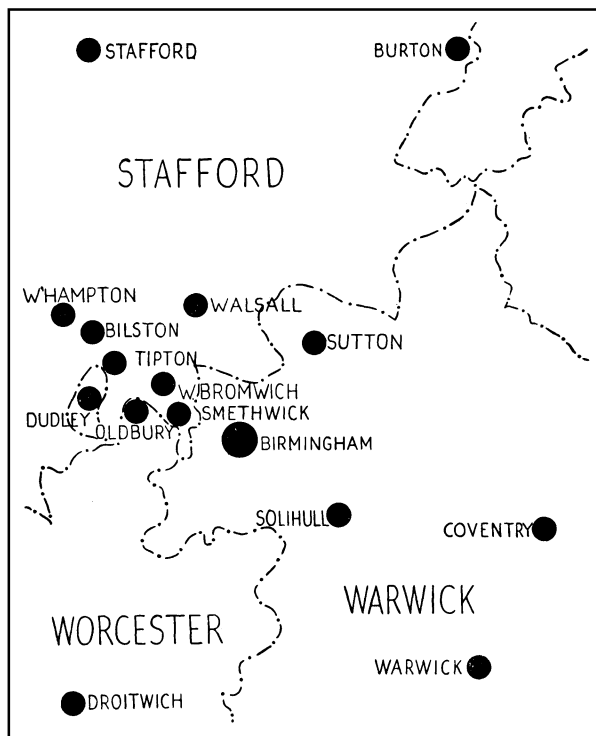
These three counties, then, close neighbours in the Middle West, comparable in their difficulties because all three have problems arising from increasing and shifting populations, in urban, suburban and truly rural communities, are approaching the problems of secondary education in markedly different ways. But all three will keep their grammar schools and their 11 plus examination; only the methods of selection will differ.

The first three Boroughs

Alphabetically our first three boroughs are Birmingham, Burton upon Trent and Coventry. Purely by chance the variety of pattern found in the three counties is almost repeated in these boroughs. One is 'going comprehensive,' another providing a wide range of secondary schools including comprehensives, and the third is to remain firmly tripartite. In all three some form of selection will remain.

Diversity is the most striking characteristic of secondary education in the city of *Birmingham*. The 17,000 children in a transfer age-group may go to any one of the following types of secondary school; grammar, technical, bilateral, modern (with or without extended courses) and comprehensive. The development plan envisaged a 30% intake into selective schools, 16% of these going to grammar schools and 14% to technical schools; the remaining 70% would receive a general secondary education. At present approximately 14% of 11 year olds go to grammar schools, 3% to technical schools,

REPORT FROM THE WEST MIDLANDS



78% to modern schools and 5% to comprehensive schools. There is a large intake to technical schools at 13 plus, however, so that in all rather more than 8½% of 14 year olds are in technical schools. Additional technical places are being provided as new technical, bilateral and comprehensive schools are completed.

In addition to two direct grant schools (King Edward's School and King Edward's School for Girls) there are five voluntary aided grammar schools provided by the King Edward VI Foundation, two Roman Catholic grammar schools (with one or two more to be added), and one independent grammar school. There are thus, in the city, eight voluntary and fifteen county grammar schools. All the proposed county grammar schools have now been built and the entry will soon have reached the target of 16%. Of all these grammar schools only three are coeducational.

There are approximately 100 county modern schools divided fairly evenly into boys', girls' and coeducational schools. Over a third of these are already providing extended courses of various kinds, including courses leading to the ordinary level of the G.C.E. This wide and rapid development of extended courses is perhaps the salient

feature in the present phase of secondary organisation in Birmingham.

Two large comprehensive schools are already at work, two more were envisaged in the development plan, and a fifth is being considered. A further increase of schools of this type is possible, but the difficulty of obtaining suitable sites is one factor which could tend to retard such a development.

In his account of the organisation of secondary education in Birmingham (*Education*, 5th December, 1958) the chief education officer writes: "The future may well see the addition of still more variety in the form of different types of bilateral schools and small comprehensive schools . . . It is probable, however, that the chief development for the next few years will rest with the modern secondary schools which may well drop the title 'modern' and continue to widen the opportunities which they provide and to increase their overlap with other schools. As this happens the selection examination can be expected to assume less and less importance."

In *Burton upon Trent* life is not so complicated, at least, not at first sight, for the authority's pamphlet *From Primary School to Secondary School* tells us that in this area "secondary education is provided in three types of school (1) Grammar (2)

Technical and (3) Modern," Full stop. And no nonsense. But we learn elsewhere that the technical school is virtually a grammar/technical school and that something ought to be done to enable the more successful pupils in modern schools to attempt G.C.E. courses.

There are certain objections to the provision of G.C.E. courses in modern schools :

- (a) The number of likely candidates in any one modern school is small.
- (b) Concentration of staff time on these few is hard to justify.
- (c) Modern schools have staffing difficulties.
- (d) Concentration of these likely candidates in one modern school would lead to invidious distinctions and set up a new type of modern school.
- (e) The pace of modern school pupils is slower than that of selected pupils and the former might have to be forced hard to cover the syllabus.
- (f) These pupils might, therefore, be deprived of much of the social and cultural value of school life.

The Technical College and G.C.E.

Considerations such as these have, apparently, caused the authority some doubt as to the wisdom of setting up full G.C.E. courses in their five modern schools and an alternative scheme has emerged which has the agreement and enthusiastic support of all the head teachers of modern schools and of the principal and staff of the technical college. This is the provision of a six year course, the first four years of which will be spent in the modern school and the last two in the technical college. Such a scheme, it is suggested, would avoid the difficulties enumerated above and would, incidentally, also make the best use of well-qualified staff in the technical college (v. *The Times Educational Supplement*, 24th April, 1959, p. 705).

Certain conditions would have to be fulfilled. The chosen pupils would have to remain in the modern school until the end of their fourth academic year, and parents would need to be made aware that, when they agree to their child's starting this G.C.E. course for a period of six years, there would be automatic transfer at 15 plus from modern school to technical college, and the course would have to be envisaged by the parent, from the beginning, as one continuous whole. This is a new trend indeed, but the scheme has not yet been officially adopted. If it does not find favour the authority may still resort to the "very real channel of exchange" by which a child can be transferred from the modern school to the technical school at 12, 13, 14 or 15 years of age. But transfer of this sort is no

longer acceptable to modern school heads who are trying to enhance the status of their schools, for they rightly object to the continued erosion of their strength ("emaciation" is the more clinical word of the N.U.T. memorandum) by the systematic removal of their best pupils during the school course.

The Coventry Schools

The phoenix city of *Coventry* has made substantial progress towards its goal of comprehensive schools for all, or nearly all. For tragic reasons the authority was better placed than most to embark upon sweeping reforms after the war. The pre-war city was gutted and much of the ever-increasing population has been housed in extensive new estates which may develop their own neighbourhood patriotisms.

Seven comprehensive schools are already in operation, two for boys, three for girls and two mixed. Most of these are in new buildings on new sites. An additional mixed comprehensive school is to be opened in September 1959, and two modern schools are to be amalgamated with a view to their eventual conversion into a fourth school of this type, so that in the near future there will be nine comprehensive schools. There will still remain about a score of modern schools, five of them mixed.

There are four grammar schools, two for boys and two for girls. The two boys' schools, Bablake and King Henry VIII, have long and honoured traditions and are now direct grant schools. The girls' grammar schools, Barrs Hill and Stoke Park, are municipal schools still comparatively in their salad days. The authority purchases 75% to 80% of available places each year in the direct grant schools.

Approximately 25% of the age-group (about 600 pupils) are selected each year to go to the four grammar schools and to the comprehensive schools for, since the area is not yet totally covered by comprehensive schools, a pupil may opt for any comprehensive school in the city if he lives outside a comprehensive zone. The ultimate aim is that each comprehensive school should fully serve its own neighbourhood.

But the direct grant schools, in the foreseeable future, will remain independent of the comprehensive system. They will also continue to attract the cream of the city's boys, as the municipal grammar schools will attract the abler girls. This state of affairs naturally causes concern to the authority who wish, quite understandably, to see their comprehensive schools prosper; they can do so only if they secure a reasonable proportion of the more promising children at 11 plus. It is difficult to devise a formula which ensures an equitable distribution of abler pupils throughout the secondary schools and which, at the same time,

pays due regard to the wishes of parents. Those who conceive of the integration of secondary education as necessarily involving assassination (Sir David Eccles), destruction, ruin and disaster, should seek to study how wisely this delicate problem is being handled in Coventry.

Dudley and Smethwick

Dudley (10.1%) has the unenviable distinction of lying bottom of the Ministry of Education's league table list of selective school places offered by all the local education authorities in England and Wales. Like Burton upon Trent, it has a grammar school for boys, a high school for girls and a mixed grammar/technical school. This last is, as yet, the only secondary school which deviates in any way from the 'traditional' system, as it is a bilateral school. It is rapidly gaining prestige within the authority and offers advanced level courses in a wide variety of subjects, academic as well as technical and commercial. As in Burton upon Trent there is a certain amount of transfer from the modern school to the bilateral school but here only at the age of 12 and 13. The 13 year olds also have an opportunity to sit an examination for the technical school, which is part of the Dudley and Staffordshire Technical College, where they may prepare for G.C.E. or pre-apprenticeship courses. Moreover, pupils aged 15 plus may attend a full-time G.C.E. course in the Technical College, a course designed to enable former modern school pupils to continue their studies.

It has been difficult to obtain official information about developments in Smethwick but it seems unlikely that any drastic changes will be taking place in the near future. For boys there is a three-form entry grammar school and further selective entry into a technical school which is allied to the Chance Technical College. The corresponding grammar school for girls has recently been enlarged by the construction of a splendid technical wing to which may be added accommodation for commercial training. The three-form entry will be increased to five forms and the school will become, in fact, a grammar/technical school. It seems possible that extended courses will be introduced into at least one or two of the eight modern schools.

The Three Ws^(*)

Wolverhampton has a new bilateral mixed school, with three modern and two grammar streams. Situated on the edge of the borough, it offers special facilities for rural studies: a pleasing feature in a Black Country school. Apart from this, however, the secondary school organisation is orthodox tripartite.

Walsall has long been comprehensive-minded, though plans have been restricted and delayed by

building restrictions. The Joseph Leckie Comprehensive School, for example, has had to take an undue proportion of selective pupils.

The authority believes that the basic unit of secondary organisation should be the eight-form entry non-selective school. It is assumed that two streams would be capable of completing a five-year course to G.C.E. ordinary level in a normal range of subjects. Advanced work would probably be concentrated in two schools.

One of these would be the new T. P. Riley Comprehensive School, opened last year with a five-form entry but due to be extended. Separate house blocks, such as characterise the new schools of West Bromwich and Coventry, are provided. This means of keeping small, intimate groups within a large school is perhaps the most distinctive contribution made by the West Midlands to this form and shape of the new secondary education.

Parental Choice

A unique contribution also comes from *West Bromwich*: but this is in the sphere of policy rather than organisation. Darlington has just fallen foul of the Minister because it proposed ultimately that all children in the neighbourhood of a proposed new comprehensive school should go there. It would have done well to copy West Bromwich, which manages to preserve the full ability range at their new comprehensive school while at the same time *enlarging* the field of parents' choice.

This is the scheme which has worked most successfully since Churchfields High School was opened in 1956. Parents of children in the last year of junior schools in the Churchfields district are interviewed and asked to choose in principle between selective and non-selective education. The children of parents who prefer the former take the usual tests and are allocated accordingly to grammar, technical or modern schools. Where the parents prefer non-selective education the children do not take the 11 plus examination, but go automatically to the local comprehensive school.

So far, year by year, West Bromwich finds that about 90% choose the comprehensive school. Practically all the others want and expect to get into a grammar school. Those who are disappointed cannot, of course, go back on their original decision and take the comprehensive school as a second best. The vacant places are filled with children from outside the neighbourhood whose parents wish them to have a comprehensive school education.

West Bromwich's masterly policy deserves to be more widely known and followed. Far from diminishing parental freedom it enlarges it. And what a resounding vote of "No Confidence" the parents of Churchfields pass every year in the 11 plus examination and all it stands for!

(*) This section has been contributed by Robin Pedley.

DISCUSSION

COMPREHENSIVE FURTHER EDUCATION

LESLEY LEWIS

Vice-Chairman, Ipswich Education Committee

HERE IS A subject which is fully ripe for DISCUSSION. May I start by some challenging statements? All education beyond school leaving age (s.l.a.) is Further Education and should be considered together: a more unified, universal and varied system of Further Education is as necessary as a comprehensive secondary system, and looking at present day problems from that end may give us a new perspective. I have been led to this viewpoint by the success of an experiment which has evolved in Ipswich and which I shall now describe. I wish however to make it clear that, although I am Vice-Chairman of the Ipswich Education Committee, I alone am responsible for the inferences drawn from it.

Of recent years alongside the usual schools for Further Education—art, building, commerce, science, technology—and knit together with them in what we term the Civic College (soon to be housed in a new imposing building) we have run a “School for General Studies.” This school serves Ipswich County Borough and the adjacent areas of the East Suffolk C.C. Children proceed to it at s.l.a. without examination on the recommendation of their secondary head teachers. It is now 400 strong and is growing every year. It gives full time instruction and enjoys the same facilities of free tuition and books, maintenance grants and cheap transport, sport and clubs, as secondary schools. It offers 16 subjects for G.C.E. at “O” level, students taking up to 9 subjects, and 11 subjects at “A” level, with the possibility of two-way transfers with the grammar school, thus extending the scope of both schools. It sends many scholars to training colleges and some to the universities, while others remain in the college to prepare for examinations and apprenticeships in art, engineering, building, clerical, secretarial, intermediate professional work, etc. The total number of students in the College as a whole is 4,000 of whom 650 are full time and the proportion of the latter is rising every year. A working party is being set up to co-ordinate the preparatory work in the secondary schools and to consider a possible greater fluidity in the choice of qualifications aimed at.

The experience gained in running this junior department as part of a vigorous upward-extending College has proved certain facts which have even exceeded our original expectations. The percentage of examination successes is considerable and parents already accept the prospect of transfer here at s.l.a. as a satisfactory alternative should their children fail at 11 plus to scale the grammar school hurdle. It seems psychologically sound that children at the crucial age when some of their contemporaries are going to work and becoming adults should not be left behind at school but move up to college, with its new atmosphere of maturity and independence. The exceptional zest and responsibility with which they work and the keenness with which they enter into and run the social life of the College would seem to

be a big factor in the gratifying temperamental as well as scholastic successes achieved.

On the administrative side the advantages of the large number of courses and the high quality of staff and equipment which can be offered by such a central college are obvious and help to meet the present demand for a greater spread of trained ability in all branches of industry and business as well as in public service and the professions. The strength of the grammar schools has not been in their coaching in general subjects in the lower forms, which other schools can provide if they really get down to it, but in their concentration on the upper forms, where specialist teachers and equipment must be provided in a steadily growing number of subjects. Our Ipswich boys’ grammar school, the Northgate, has recently become a grammar-technical school and in the last ten years the number of subjects offered at both “O” and “A” level has grown from 11 to 19. Authorities are rightly saying, even where they agree with the comprehensive principle, that they cannot supersede their grammar schools until they can provide comparable facilities in the new system, and the above figures pose a formidable task for any district schools however large.

We agree that there is nothing good to be said for segregation at 11 plus but is there not quite a lot for responsible choice at s.l.a.? Comprehensive Further Education could give the maximum outlet for all abilities, aptitudes and ambitions in a central institution, which, when fully established, could absorb the upper forms of the grammar schools, while the lower forms merged into the common secondary schools. It would often be easier and more generally useful to enlarge the existing facilities for Further Education by building a new all-embracing college than to erect a number of district comprehensive schools; such a central institution might catch the imagination of both parents and children as the goal towards which they could hopefully travel from earliest days. A cultural centre—wide opportunities with equal status—checking the growth of intellectual snobbery and the meritocracy.

SCIENCE IN THE JUNIOR SCHOOL

ROBIN KEEN

Assistant Science Master,
Alleyne’s Grammar School, Herts.

IN THE LAST FORUM, Eric Linfield comments that two attitudes are beginning to arise towards the teaching of science in junior schools. Some would treat it as a specialist subject; others expect an introduction of scientific method and a scientific attitude into general class teaching. If, as appears likely, school organization becomes more flexible, and if, as appears desirable, this should lead to a delay in transfer to secondary schools till 13 plus in some areas, this may become a major issue.

My experience with first-year grammar school boys suggests that the introduction of science as a subject before 11 is to be avoided, but that the introduction of a

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scientific attitude is to be encouraged. The question is, by what means?

Our ninety first-form boys come from some twenty local schools and I have tried to find out what science they have already studied. About half have listened to some B.B.C. schools broadcasts. A few have seen certain demonstrations, very few have done any practical work for themselves; roughly a third have collected specimens, usually biological, but for the sake of collection rather than for study. Some have been encouraged to collect odd scraps of data which do not appear to fit into any systematic scheme of work; of the 50% who know that "metals expand when heated," hardly any know a way to demonstrate this—though rather more do know why gaps are left between railway lines.

What, in this situation, is done in secondary schools that might be introduced earlier? Most boys look forward to their first laboratory lessons with immoderate enthusiasm. My aim is to preserve this enthusiasm for all things scientific and to channel it into a desire for finding things out; then, as their mental abilities mature, to teach children both to sift evidence and devise experiments to decide between conflicting view points.

Many secondary school courses start with an easy demonstration to show that an iron bar expands when heated, and far too many textbooks go on to state bluntly that *all* solids expand when heated; this is a very shoddy beginning to a course in science. The boys are quite willing to accept this statement, but each loose generalization of this sort undermines exactly what they should be taught.

Children must be invited to try things for themselves. The essential point is that work should be experimental, not illustrative; designed to *find whether* (e.g.) a pyrex rod expands when heated, not to *show that* its does. I am quite willing to spend the whole first year on this sort of work. Last year a rather backward boy showed that a laboratory broom handle appears to contract on heating and thereby learned, and taught the rest of the class, that not all solids expand on heating; and so, too, that not every statement in print is to be trusted, that the text book is a poor substitute for experiment. After a large number of experiments the class decided that almost all solids expand on heating.

Very few of the first-formers I meet in September are destined to become scientists; many will be technicians, shop-keepers, clerks, librarians, policemen, dentists, and the course must serve them all. All will still have some work ahead of them in the year 2,000, when today's factual data will be about as much use as a 1920 Bradshaw in 1959. What matters, then, is not how much they know, but rather, that they appreciate scientific method, its achievements, and its limits.

What can junior schools do to prepare the way for this? As I have suggested, the experimental approach is not grasped by watching demonstrations, but by doing experiments to solve problems previously posed—preferably by the children themselves. Since few junior schools have laboratories equipped for more than demonstrations, it is probably best, at this stage, to illustrate scientific thought and achievements through other subjects, particularly history. On the other hand, to introduce into the primary syllabus very simple statistical comparisons, biological experiments using a control group, and elementary graphs would greatly

help first year secondary work and, incidentally, illustrate valuable concepts.

A serious study of the link between the two stages by the N.U.T., the Science Masters Association, or any other responsible body, would be invaluable.

JUNIOR SCHOOL STREAMING

ALEX WOOD

AS A PARENT, with three sons—one at junior, one at infant school and one in the cradle—I was interested in the article in the first number of FORUM on "Junior School Streaming."

I live in a New Town where some fine new schools have been built in the past ten years, a town where the young inhabitants are building a family life for the first time in new houses and fresh surroundings, away from the slums of the old industrial towns. People like this accepted promises about a better education for our children after the war.

Parents rightly tend to leave questions of education in the hands of their headmistress or headmaster. But where we fail is in ensuring the necessary facilities so that schools can improve our children's education.

On parent's day at my eldest son's school there is a constant flow of guardians through the school corridors, searching glances at the blackboard to see where Brian, Paul or Susan's classroom lies. The thorough examination of children's work that follows belies any impression that parents don't care.

But I remember seeing some parents deeply shocked that their daughter had dropped well below the half way mark at the end of term examination and that she was in a "B" stream; later, after a conversation with the headmaster, they were grieved to find she had only a slender hope of going to grammar school. This could be repeated thirty-five times in that class alone.

Here were thirty-five pupils being cut off from a full secondary education. What chance does the "C" stream have? If the lower streams have no chance, how are we to get the many more technicians we need? This can't be left to chance.

In a television interview after the last Conservative conference, Mr. R. A. Butler answered questions from schoolchildren. One asked what happens to a boy or girl who, having made a slow start, suddenly and rapidly advances, but having been in a lower stream is handicapped—an indication that children themselves grasp the unfairness.

Mr. Butler suavely replied that allowances are made for such pupils to catch the "next bus, having missed the grammar school bus at the first stop." But why should education be a matter of catching one small bus or being left behind?

In the main parents are now more conscious of their children's needs. Over the past years bigger wage packets have made it possible for them to buy books to assist their children. But on the other hand their children are put in streams, and have to sit an 11 plus examination which decides their future, and this has a tragically unhappy effect on all concerned.

It is good that educationists should bring to the notice of the nation the harm done by streaming. What is needed are steps to raise standards of education so that students of higher quality are produced from every school, otherwise this country will have no place in the space age. Imaginative local authorities who have tried alternative methods with some success and those who have started fine comprehensive schools are showing the way to a brighter education, necessary in the wonderful century in which we live.

STREAMING IN SECONDARY SCHOOLS

M. M. BARRETT

MY TEACHING EXPERIENCE has been long and varied, including work in small and large units, single-sex and co-educational, modern secondary, central and comprehensive schools; in some too small to consider streaming, others where it was not emphasised and schools where it was strictly adhered to and the children aware of the situation.

What are the guides used to stream? Either (1) verbal reasoning, (2) English attainment, (3) mathematical attainment, (4) the average of the two foregoing, (5) this average together with verbal reasoning, (6) the average of attainment in a multiplicity of subjects.

There are often discrepancies in results. Some children produce a good score in mathematics and less good in English, others do well in verbal reasoning but poorly in attainment, and *vice versa*. If, then, English attainment is the guide, varying mathematics results come together, while streaming according to verbal reasoning may give a wide variety in both mathematics and English.

Apart from this, my experience suggests that there can be no 'correct' classification, since no formula can be produced to evaluate and graduate the complexity that is man.

What, then, are we assessing when we stream? J. E. Floud, in *Social Class and Educational Opportunity*, states that "the favourable attitudes of parents to education distinguished the successful from the unsuccessful." If so, is it not parental attitude as reflected in the child that we stream rather than the capacity of the child itself? In other words, we group together at the bottom children whose parents are disinterested or irresponsible, separated, from broken homes and so on.

As a result, as anyone who has worked in a streamed school knows, the 'less able' groups contain children more difficult to handle. How can such children be relaxed and poised for work? To group them together

in a low academic stream is to add to an unsettled home background rejection at school. An educational approach, concerned with the development of children as individuals and as members of society, would suggest mixing them with emotionally stable and integrated children.

Nor are 'less able' children so dull and incapable as streaming would have us believe. The majority of secondary pupils are aware of and interested in the world, they all have the power to comprehend, seek enlightenment, discuss; where they differ is mainly in written expression.

It is generally accepted that infants learn to comprehend and think before achieving oral expression which, in turn, precedes written expression. Would it not also be agreed that feeling, comprehension, wisdom, judgement, outstrips oral or written formulation later?

The child classed as 'least able' may well have a deeper vision of life, warmer impulses, expressed in a desire to become a nurse, than the so-called able child whose ambition it is to be a shorthand-typist. Why not, then, put them together, the former to help in living relationships, the latter with skill of expression?

With forms of completely mixed abilities, a beginning could be made in teaching some subjects to all the children together—appreciation of an expression in art, needlecraft, housecraft, physical education, could be enjoyable common experiences. It should also be possible to coach groups in basic skills. Entrants to secondary schools are stimulated by the new environment and advantage can be taken of this to push ahead.

More account can be taken of children's own interests. Out of school clubs often draw them together on the basis of common interest, and greatly flourish without streamed ability becoming dominant; the same approach could be fostered in school.

History, a subject which has to do with a common cultural heritage, a shared experience, can be taught to mixed ability groupings. Group studies, with each child contributing in the field in which he has most skill, can be stimulating and rewarding, leading to co-operation in making models, exploring libraries and so on. It is said that homogeneous grouping makes class teaching easier. But this may merely mean that class lecturing takes place, hardly the best pattern for the formative years.

In general, work undertaken together, which incorporates and recognises the contribution of each child, can only help to forge a progressive and liberal society in which human relationships are recognised and human needs supplied.

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the public system. The other may well be an expansion of the better parts of the private sector, as more and more people earn incomes big enough to allow them to buy an education for their children, and more and more people become dissatisfied with big classes in public primary schools and with the secondary modern schools. At present private expenditure is probably about £40m.; by 1968 it will certainly not be less and it may be more. On

the other hand, the elimination of the worst schools may raise public expenditure, and so add to the tax 'burden'—possibly by as much as 5%.

This survey has on the whole not been very encouraging. A wealthy country, excited about education, does not plan to increase its education expenditure as fast as the national income. This will please the tax-payers, but it is frightening to those who consider that the future of their country is not unconnected with its schools.

The Cost of Reform

JOHN VAIZEY

THE 'BURDEN' OF expenditure on education in the future can be assessed in a number of ways. The number of teachers, school places and ancillary services expected can be costed at—say—1958 prices and a total figure can be given which can be compared with similar figures for the past. This is unrealistic, however, if wages and prices in education change differently from prices in general, so guess has to be made about price changes. Then, the 'burden' of any expenditure is meaningful only if it is expressed as a proportion of the total flow of goods and services—the national income—expected in the future, so a guess has to be made about this. Lastly, a change in the method of payment for education may increase or reduce the level of rates and taxes. In this article I shall try to forecast likely orders of magnitude of expenditure in 1968, assuming that most of the commonly hoped-for reforms will have been introduced by then. I shall make use of the techniques explained in my book *The Costs of Education*. (For the next few paragraphs all the calculations are in 1955 prices).

In 1955 education expenditure in the U.K. was £410.6m. for public education and £30.9m. for private education, while capital expenditure was £77.5m.⁽¹⁾ How may we expect these totals to change by 1968? First, the school population will be different. According to *Education in 1957*⁽²⁾ the primary population will be down by 3%, while the secondary population is expected to increase by 27% in England and Wales. (The experience of the rest of the Kingdom is better considered separately). At constant standards and prices, this is likely to add £29m. to the total. But we have also to make allowance for other costs arising from changes in the child population. Meals, milk and health are the most important factors, and a further £10m. can be expected under these heads.

Certain improvements may be foreseen. The size of classes may fall to the present regulation standards. In 1968, to achieve the aims set out in *The Supply of Teachers in the 1960s*, another 66,000 teachers will be needed. This would raise the salary bill (in 1955 prices) by £43.5m. Of these extra teachers about half are due to the increase of the child population (already noted), so that the improvements may be assumed to cost about £22m. Most of this increased expenditure is noted in *Secondary Education for All*⁽³⁾; of course, at 1958 prices it is substantially higher. Further, an increase in the number of teachers will be accompanied by more expenditure on ancillary equipment;

new schools, for instance, cost nearly a third more to maintain than old schools.⁽⁴⁾ It would seem that a rise in the standards of the worst schools might easily add £20m. to the bill (again at 1955 prices).

Certain other changes can be foreseen. University costs may be expected to have risen by three-quarters from £34m. to £60m. Revolutionary changes in the remainder of higher education should by then have taken place. The colleges of advanced technology and the teacher-training colleges (let us hope that they will be colleges of liberal arts) should be providing at least 50% more students with a better education. It is possible, therefore, that expenditure under this head will have doubled. This is equivalent to an increase of £20m. for higher technical education, and £6m. for teacher-training. It must be emphasised that this is an outside estimate; probably the expansion will be smaller.

There remain a number of other matters to be included: for instance, £5m. might possibly be spent on additional nursery schools. Other developments, however, seem less likely and it is less possible to guess what they might cost. Three enigmas in particular need to be mentioned. First, there is the extra school year or—at the very least—the four year secondary course. This is likely to cost less than might appear because the schools are often staffed for a four-year course and the top forms gradually empty throughout the year. Then, probably nearly a third of the age-group 15-16 already have full-time education. An extra year, too, would reduce considerably the demand for further education, which provides extensive facilities for pupils of this age, and further education itself largely provides a substitute for an adequate general education⁽⁵⁾. Probably an extra school year might cost between £10m. and £15m. Then there is the proposed extension of further education. In a sense this is an alternative to the extra school year. Finally, the emergence of the near-comprehensive school is likely to increase the number of those who stay on. This again, however, is an alternative to the formal raising of the school-leaving age. It might be wise, therefore, to budget for between £10m. and £15m. for some change in the number of years of the school-child's life.

Allowance has also to be made for Scotland and Northern Ireland. If similar calculations are made for those countries a further expenditure of about £15m. may be foreseen for them; the total child population of Scotland will probably fall considerably.

(1) *The Costs of Education* (London, 1958), Chapter 4.

(2) *Cmnd.* 454, 1958, pp. 8-9.

(3) *Cmnd.* 604.

(4) *The Costs of Education*, Appendix G.

(5) Stephen Cotgrove, *Technical Education and Social Change*, (London, 1958), Chapter 11.

If all these changes are added up they come to about £168m.

CHANGES IN CURRENT EXPENDITURE ENVISAGED BY 1968

	£m.
Expenditure in 1955 at 1955 prices	411
Add (at 1955 prices) :	
Additional schoolchildren	29
Smaller classes	42
University expansion	26
Higher education expansion	26
Nursery schools	5
Meals, milk and health	10
Age-group 15-16	15
Scotland and Northern Ireland	15
Total expected by 1968 at 1955 prices	579
Total expected by 1968 at 1958 prices	725
Capital expenditure in 1958	108
Capital expenditure in 1968	50

What about prices? Expenditure in 1955 was £411m. and by 1958 it had risen to about £590m. A major part of this was due to price changes—between 1955 and 1958 the salaries of teachers rose substantially, so did the general price level and the rate of interest: the price index applicable to education rose by at least 25% in these three years. Consequently only £77m. of the difference between the years 1955 and 1958 was a genuine rise in educational provision, and the major part of this rise was attributable to the bigger child population and to extra expenditure on higher education. This figure suggests, however, that over half the distance between 1955 and 1968 has already been covered. Allowing for price changes between 1955 and 1958, total expenditure in 1968 on the assumptions made here is likely to be £725m. at 1958 prices, or about £135m. (or 24%) more than in 1958. (This compares with an estimate of an extra 18% made in my book).

Is the price index for education likely to rise more than the average, however? Since education is not a major market for any good, the answer is "no"; but it is a major market for one type of labour—teachers. Are they likely to become relatively better-off than other sections of the labour force? The answer is a complicated one. An increase of over 25% in the number of teachers is an increase in demand likely to strengthen the teachers' bargaining power. On the other hand, the supply of young people—especially girls—with G.C.E. "A" level passes is growing rapidly, so that the pressure arising from extra demand will be relieved by a bigger supply. The shortage of scientists, if it persists, may raise the price of these teachers and so of all teachers; but is it likely to persist? The elimination of the unqualified teacher and the rapid rise in the number of graduates, together with the accomplishment of equal pay, will automatically increase the salary index by about 10%. In general,

however, I doubt whether teachers will go relatively ahead—in 1913 the qualified male teacher, on his maximum, earned nearly four times the average adult male wage. In 1958, he earned less than twice the average adult male wage. I would expect this process to continue.

Finally, capital expenditure remains to be considered. At present this is running at over £120m. a year, of which £108m. is found from government or local government sources. If this rate of expenditure persists, by 1965 the problems of provision for the extra child population will have been solved, and so will the replacement of slum schools.⁽¹⁾ Thereafter, capital expenditure can fall to a level of replacement and renovation, perhaps at £50m. a year. Thus, the extra £135m. expected to be spent (at 1958 prices) by 1968 on current expenditure will be offset by a saving of £58m. at least on capital account.

Adding all this up, the extra demands represented by the expansion from 1958 to 1968 are likely to be £77m., or about 14% more than the 1958 total.

Since the national income is likely to rise by at least 20 to 30% in the next decade, the 'burden' of education as a proportion of the national income is far more likely to fall than to rise unless educational plans are drastically revised upwards. It is more than possible that in the future education will fall back to its pre-war proportion, only recently surpassed. At its very worst, the national income would only have to rise by about 1.5% a year to keep the proportion constant; in the past it has averaged about 2%.

What, however, of the tax burden? In general tax-receipts rise with the national income, so it may be expected that the tax burden will fall, too. This neglects, however, the possibility that the private sector may in some way change over the next ten years. At present it takes about 9% of the school population, and is divided into two parts—a small one, much better than the public system, and a larger part which is much worse. From the point of view of an economist the economic 'burden' of incorporating the private sector into the public system depends upon whether more teachers and schools would have to be provided than are at present available in both sectors. If all the private sector were up to the standards of the best schools, then there would be on average a rise in the standards of the public system, and the 'burden' might even be lessened. In fact, however, the bulk of private schools are inadequately staffed and housed, and there would have to be additional expenditure to bring them up to the standards of the public sector. Over the next decade two separate factors may operate. One will be the closing of the worst private schools, and the entry of their children into

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⁽¹⁾ *The Costs of Education*, pp. 91-92.

At the Editors' invitation Mr. J. G. SHIELD, inventor of a simple but revolutionary aid to science teaching, describes how he came to produce, and some of the uses of, his new

Everyman's Microscope

LIKE MOST OTHER students and teachers of science I have always been interested and, on many occasions, fascinated and inspired by the lives of scientists such as Pasteur, Lister, Faraday, etc. But for me the one who provoked the greatest fascination was a less well known Dutch precision worker of the 17th and early 18th century : Antony Van Leeuwenhoek. He it was who made the first real microscope, consisting of a single lens but magnifying objects something like 100 times. This was the key which opened the door to the study of microbes, germs, bacteria—the greatest weapon in man's hands to date in his fight to promote better health and well being for the community.

Leeuwenhoek's microscope consisted of a tiny spherical lens of glass, held between two pieces of metal, each pierced with a small hole in which the lens rested. Objects for examination were held on a needle very close to the lens and viewed by placing the eye as close as possible to the opposite side of the lens. Screws allowed focussing of the objects and in Leeuwenhoek's hands, if in no others, great detail of specimens could be obtained, and of course he it was who first saw the tiny living creatures which we call microbes.

Improving on Leeuwenhoek

His microscope however, was extremely delicate to handle and few others attempted to emulate it. It eventually gave way to a more complicated but less irksome (because it was larger) type of microscope involving the use of two or more bigger lenses. The single lens idea then was discarded, making room for others capable of further modification and improvement. This briefly is the history of the microscope.

After the war, when I returned to the teaching of general science, I became obsessed with the idea of resurrecting Leeuwenhoek's microscope and improving it rather than discarding his basic idea. For teaching purposes it had many virtues. It was simple and therefore inexpensive to produce. It achieved excellent clarity and a magnifying power sufficient for normal school work. Surely, I felt, it must be possible to improve it somehow, retain its advantages, and yet in so doing bring it within reach, from all points of view, of the individual

child in the class. I had had much experience of children having to take turns in looking down the one and only class microscope with all the irksome and frustrating emotions which that procedure entails.

My microscope achieves a magnification of 150 with its single spherical glass lens. This lens is made so as to retain a small stem of glass. This stem makes for very easy holding. The microscope is also designed to eliminate any necessity for focussing, a difficult procedure at any time for children. It is a precision instrument and objects are pre-focussed. You simply introduce a microscope slide and view it immediately and with quite astounding clarity.

Slide Making

A slide consists of two pieces of plastic of a definite thickness, between which the specimen to be examined is placed. Naturally, processed specimens are superior to unprepared ones, but there are hosts of specimens which are very satisfactorily viewed without any preparation whatsoever, e.g. hairs, leaves, fish scales, iron filings, wasps' stings, flies' legs, nettle stings, and so on.

The preparation and staining of specimens for microscopic observation is a vast field of study, but with this microscope in the hands of all children no doubt it would be pursued some little way by many classes. More permanent slides can be made by using some plastic adhesive to stick the two pieces of plastic together. Acetone does the job very satisfactorily and in a few seconds. Thus it is quite possible for each child in a class to have his own collection of slides as well as his own microscope for studying them. Fibres of various kinds can be examined by simply placing them near to the lens when some portion of them will be bound to be in focus.

It is in the examination of living specimens that this little microscope really outstrips all others. A small test tube filled with pond water or hay infusion, for example, can be slipped into position just as readily as a microscope slide, and microbes and tiny animalculae can be viewed very easily. With very little practice children are able to manoeuvre the test tube up and down, or turn it round, thus

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'angling' for specimens, or keeping one particular creature under observation.

The field of view is comparable with that of expensive microscopes achieving a similar magnification. I have observed many types of microbe as well as the larger protozoa—paramecium, amoeba, rotifers of all kinds, cyclops, daphnia, stentor, etc. and many hundreds of times have watched, for example, reproduction in the case of paramecium, amoeba, colpidium, etc. All manner of simple experiments can be devised with such specimens. Subjecting the tube to heat, cold, soap, salt, dettol, permanganate and the like gives the children the feeling of doing real scientific research work in the manner of Lister, Fleming, Salk and others, which of course it is.

Used with thought and care this little microscope can revitalise one's teaching of biology. Each child can have one, and even then the cost is only a fraction of the usual type of class microscope. It can be carried in the smallest of pockets and observations out of doors made just as readily as inside. Who knows what revolutionary discovery might well be made by children and teacher alike with such a simple yet efficient little instrument in the hands of one and all?

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The Teaching of English

(1) THE PRIMARY SCHOOL

MARGARET WILSON

THE TEACHING OF English in the junior schools is to my mind of such colossal importance that all else fades into insignificance beside it. This statement will possibly bring howls of rage and disapproval about my ears. Nevertheless in this article I shall try to prove my point and explain what I mean.

The Importance of Language

At this stage of a child's life we are faced with the tremendous responsibility of trying to teach him a little of everything, at the same time training him to be a reliable member of the community. The junior school curriculum is fearsome. Sometimes it seems to me that only a superman could ever cope with it. Nevertheless thousands of teachers do just this every day of their lives, and scarcely realise what a task they tackle. For we dare not deny our boisterous junior anything. His stupendous energy will carry him on through a day of arithmetic, physical training, English composition, handwork, music, geography and swimming. During lunch time he will practise bowling or play a chess match, and at the end of the day will be seen hurrying to the common for his cricket. All these delights are his birthright, and quite rightly are taken in his stride. I am not, of course, writing only of boys, for the girls have at least as much energy and vitality as their brothers.

Can we say that any one of these activities is more important than another? I think we can. Without a firm knowledge of his mother tongue, a child's enjoyment of all good things can be blurred from the start. It has been said that every lesson in the junior school is an English lesson. I would rather put it another way, and say that no lesson makes sense without the ability to read, write, speak and comprehend. We junior teachers then, must be prepared to teach our pupils to do these four things to the limit of their capacity, before they leave us, and I state categorically that whatever else we teach them—however splendid their progress in games, handwork, needlework, country dancing or swimming, we shall have failed them if they go from us without a sound knowledge of their own language. By the same token they will be unlikely to make any progress in history, geography, science or nature study. We must not fail them, for I am convinced, and so are my most experienced col-

leagues, that every child, with the exception of a very small percentage of unfortunates, can learn to read and write in the junior school. Indeed it is no idle dream.

Nevertheless the teacher, especially the first year teacher, is faced with tremendous difficulties. Her large class includes children with different social backgrounds, and she will have quite a few youngsters who can scarcely read at all when they come from the infants school. But she is the fount of knowledge, and her successful tackling of English will prove to be the key to all that follows. It is she who counts. Therefore she must be able to read aloud extremely well, and so convey a feeling of joy, and be able to inspire the children with a sense of the fun and adventure of books. Interesting and suitable class readers should be available, and the teacher should walk quietly round the class, directing at times those who cannot follow.

The teacher must herself possess the enthusiasm to inspire those who cannot read with the will to do so. She must encourage all the time, congratulating those who follow well, while she reads the delightful story or poem. Sometimes, for a passage, all will read together, but there should be no reading round the class. There must be no feeling that this is a reading lesson, or indeed a lesson at all, and the teacher must never appear to think that any child cannot read. This is a most enjoyable way of reading, for no child is lonely as he may be when struggling with his own reader.

Dramatic Reading

Dramatic reading can also be taught in this way, the teacher taking the chief part, and one or two good readers smaller parts. The children must keep all these class readers handy in their desks, and they will often be seen to get them out at odd times, the poor readers grappling with them, and perhaps asking a better reader for a word. It is also very important to have as large and fine a class library as possible available to all at all times. Every child should of course belong to a public library, but these are not always accessible enough.

At no times should a child be stopped reading. Within reason let him read whenever he feels he wants to. With other subjects in a junior school there are limits to the amount of time spent on them.

But there should be no limit, except his own, to the amount of time a child spends reading. Any child can learn to read if he wants to, just as anyone can learn to catch a ball. But the teacher must inspire and encourage, and make every period of English a delightful experience. She can give short interesting talks on history, geography or nature study, and follow these up by reading with the class short passages from good text books.

Until the last term of the first year, I do not think we should expect much free composition. Although some will be able and anxious to write their own stories, for most children between seven and eight this is both too difficult and too dull. But there are many excellent little books which can be used to help with vocabulary and sentence construction. Children enjoy using these, as they are in the nature of little games. But too much writing of any kind must be avoided for the first two terms. It is better to spend the time on reading or learning short poems. Any written work done should not be marked for errors, but praise must be given where it is due. Praise, not blame, is always the order of the day. I certainly do not believe in formal reading tests except possibly as an expedient at the end of the first year.

By the time the second year is reached, the children will be anxious to continue the adventures in English, and will pass on to more difficult reading books, and slightly more formal exercises. During this year a great deal of comprehension work should be attempted, though this can often be oral. Now they will read more on their own, and by this time will be able to write fairly fluently. Some will even compose their own little poems. Now a degree of accuracy should be expected, and glaring errors should be marked. But English lessons are still a glorious adventure. The teacher's own enthusiasm and inspiration are still the guiding principles of every lesson, and from the second year junior particularly, the response can be quite miraculous.

The Later Years

And so on to our third and fourth years. By now the child will be able to work more on his own. He is gaining independence and is less lonely than he was at seven plus. Nevertheless the teacher's helping and encouraging hand is still there if needed. He is now able to write about any subject within the scope of his knowledge. By this time he should be well versed in the use of reference books. He has an avid appetite for research on all subjects. As his interest in life widens, so will his interest in books increase. During his last two years he should be surrounded by books of every kind. He should be encouraged to write on many varied subjects, history, geography, sport, drama, journeys, visits, music, his own stories and his own experiences.

What of the child's speech? What of his ability to be articulate? Can this be taught? Indeed it can. With a very few exceptions, junior children are quite uninhibited, and only too anxious for a chance to talk. From the first year onwards, the child should be given frequent opportunities of expressing himself orally on those subjects which he understands.

More and Better Books

To begin with he can give his name and address, and say something about his home, his street, his pets or his garden. Later he can be asked to describe someone or something familiar to him, or tell of some outstanding incident in his life. He can tell little stories, or prepare a two or three minute speech on some aspect of home or school life.

The older junior child will be quite capable of discussion and debates, if he has been encouraged to speak during his early years. I have heard some excellent class debates given by junior children, where practically everyone has had his say. Very few juniors are too shy to say anything.

In this short article I have put forward a few ideas on what can be, and indeed is achieved by many junior teachers. Unfortunately in these schools we are often hamstrung by shortage of money, and shortage of money means not enough books. There may be junior schools in this country where all the children have enough books, but I have never come across them. It is true that thousands of children do belong to public libraries, but this is not at all the same thing as having a library in the classroom.

A good class library is to my mind an absolute essential, but how few there are! Great stories of the past, poems and drama in attractively bound books, on attractively designed bookshelves should surround a child from the start of his junior school life. He should have immediate access to books of every kind. Must this wish for our children always be unrealised? Let us hope not. My plea is for more money for more and better books.

In the meantime we must press on as best we can, for modern life demands an increasingly high standard of general education, and only sound English teaching in the junior school can make this possible. In conclusion I must stress again the importance of the teacher's inspiration in the teaching of English, particularly in the first and second years. Previously I called her the "fount of knowledge" and her successful teaching the "key to all that follows." Perhaps it would be more apt to describe her as a sparkling river, carrying light and heavy logs from the mighty forest down to the glorious sea.

(2) THE SECONDARY SCHOOL

EDWARD BLISHEN

ANY GENERALISATION ABOUT what is happening in 50,000 classrooms up and down the country is bound (short of 50,000 inspections) to be partly based on guesswork, however scrupulous. It seems not unsafe, though, to say that a number of small revolutions have occurred in the teaching of English at the secondary level, and that their effects are spreading. In fewer grammar school classrooms than in the past will you now find English being considered as an instrument of interest only when used exceptionally well by exceptional people. ("Surely something in the manner of Elia would have been more suitable," was once written on an essay of my own). Fewer teachers think of English as something laboriously constructed out of punctuation marks and parts of speech: fewer time-tables situate "comprehension" firmly on Monday, "formal" on Tuesday, "composition" on Wednesday . . . Fewer of us are working unblinkingly through a text-book, from "Term One, Week One" to the end: then quickly finding another. Fewer schools leave their children with the impression that English is a detached study, something you are good at or bad at, something you rather like or rather hate.

The New Teaching

What happened, on the whole, in the past (and persists still, alas, in places) was that the grammar school thought of English as fundamentally the study and imitation of literature: and that other schools took their cue from this and aimed at making the language of their children at least *respectable*. The little revolutions all rest on the view that English teaching ought to have aims both more modest and more ambitious than this. Modest in that they consider that, though exceptional use of language—brilliant language and inspired language—ought always to play its part in teaching—as a lure, a keen pleasure, a quickener of the common tongue—it is, nevertheless, the *common tongue* with which we are largely concerned. We want Tom, Dick and Harry not only to know how gloriously well language can be used, but also to use their own fund of it, to be able to satisfy their own demands on it, as happily and efficiently as possible. It is in this respect that the new teaching is indeed more ambitious than the old. For what it really says is that teaching ought to touch and liven the ordinary tongue of the ordinary child. Its injunction is, not "Write as much like Charles Lamb as you can," but "Discover how to write as much as you can like yourself."

It is an urgent task. Never was an age more at the mercy of the cliché. Never has more glamour been given to the language of deceit and empty

conformity. If English in the schools is a tedious subject largely devoted to syntactical surgery ("Turn to page 67: The Full Stop"): if it fails to make excitingly clear to children the real glamour of saying as well and vividly as one can what one really has to say, out of one's own personal situation: then the advertisers and the publicity men will become the real teachers of English.

More Excitement

What is involved? We must have, I believe, more excitement about English among teachers themselves. This means more excitement about English in the training colleges. No teacher ought to leave college without having known what it is to be excited about what he himself has it in him to write. It is difficult to pass on an enthusiasm you have never been led to feel. We must reconsider what the material of the English lesson ought to be. Ought it not largely to be the material the child himself brings into the classroom? Heavens: there we stand, so many of us, with piles of text-books in our hands—full of generalised material—and there before us sit our children, cramful of material of their own: their own reactions to this and that, their own excitements and dreams, their own stories. If we use the generalised material—only or largely—then we start that process which ends with English being thought of as a "subject," as the thing you are good or bad at, as the possession of teachers and professional writers. If we set out to draw on the other, native material, we make it instantly and excitingly plain that English is (how tiresomely ingenious we have been in concealing this) an intimate possession of every child we teach.

There is a very concise way of saying all this: which is that everyone should read *Free Writing*, by Dora Pym: Publication No. 10 of the University of Bristol Institute of Education, published by the University of London Press, and probably the best book on the teaching of English—at any level: junior, secondary or adult—to appear since the war. There the way of the real, necessary revolution is described: a revolution in which no teacher can become involved without exciting, not only the children, but himself. One hears a great deal, in the secondary school world, about the need to relate English to the lives of the children: much of what is said and done in the name of this need is very timid, can be seen to cling still to the old safe formal view of English teaching. You don't really liven your teaching if you merely brisk up and give a contemporary glow to material you import from outside. The essence of Dora Pym's approach is that it gets the children *involved* in their writing. Everything rests on the word 'involved.'

It is at this point that the timid aunts among us begin to raise their formal eyebrows. They have heard about all this, of course, and they know what it leads to : no punctuation, no spelling, books full of crossings out, and classrooms rabid with improvised drama. It is, of course, wildly untrue that you can excite children about the use of their own language, and really *involve* them in it, only at the price of letting slide the technical formalities of English. In fact, these formalities are, and always ought to be seen to be, part of the general excitement. They are not exciting on their own : commas have no intrinsic glamour. But if there is a general excitement about writing, commas and all their formal adjutants are no longer on their own. The way in which you mark a pause in your writing is a part of your writing. An odd thing, indeed, is that if the excitement is there, children will impose upon themselves a good deal of formality. Punctuation and the rest ought to be something you check on as you go : it all ought to be set out in little *vade-mecums* the child can use for himself, just as he uses a book of instructions when playing with a toy, or a tool-kit when getting his bicycle in order for a spin. The deadly heresy is using the book of instructions without providing the toy, or tinkering perpetually

with a bicycle on which you never permit the child to ride.

There has been, in another subject, a revolution of the kind that is beginning, and that we ought to aim at spreading fast, in the teaching of English. That subject is Art. The essence of the revolution there is the view that every child ought to approach achievement through genuine personal experience. Because in the teaching of English certain false analogies were made with the teaching of other languages—because teachers allowed themselves to be unduly impressed by what they saw as the urgent need to make their children's use of language respectable ("Dear Sir, With reference to your advertisement . . .")—because, indeed, many of us ourselves have had a pretty dreary experience of our own tongue—we have seen the situation in English as fundamentally different from that in Art. It is not different. It is our job, at any level of teaching, to excite children about their own language. Real achievement springs only from excitement. The teaching of Art in our secondary schools was transformed when the Art room became a studio and a workshop. It is the workshop atmosphere that we need in every classroom in which English is being taught.

(3) LANGUAGE AND THE GROWTH OF REASONING

M. M. LEWIS

THE RELATION BETWEEN language and reasoning is an ancient problem. A good deal of work during the past thirty years has thrown light on the beginnings of this relationship, but our knowledge of the facts is still fragmentary. Before the systematic observation of children, it was customary to make a logical analysis of the place of language in reasoning and then suggest that the logical sequence was also the pattern of progress in the life of a child. Five stages were often described. Stage 1 : before the beginning of language the child already has some perception. Stage 2 : in this perception, meaning develops as a combination of the effects of past experience together with the responses which may be evoked by the present situation. At this stage the past is only implicit in the present situation. Stage 3 : the child proceeds to symbolise the past experience ; not as yet by words but by means of non-verbal imagery, which corresponds to his sense-impressions and other responses in the past. Stage 4 : language enters as a means of symbolising both the past and the present. A word is introduced into the child's experience. Subsequently, when he perceives a new situation, he recalls the word and so his perception develops through the agency of speech. Stage 5 : as he is confronted with problems, language enables him to symbolise relationships and so reasoning grows.

The facts of development. But observation and experiment show that this hypothetical genetic sequence does not square with the evidence. There is a central fact which must never be forgotten; that since a child is, from the beginning, vocal and is born into a world of speakers, language is present as part of his experience from the beginning. From the day of his birth he utters sounds and very soon he responds to the speech of others. We have to recognise that from the beginning and at every subsequent stage, speech and the response to speech enter into perception, and so into reasoning.

The beginnings of this may be very early indeed. Two Russian workers, Shipinova and Surina, with children as young as thirteen months, established a conditioned reflex between the perception of a sweet and the colour red. To one group of children the word 'red' was spoken at each presentation, to a control group nothing was said. For the experimental group, the number of trials needed to establish the connection between the colour and the sweet was reduced to one-third and the connection subsequently remained more stable⁽¹⁰⁾.

Other Russian workers bring evidence of what happens to a child's perceptions as he acquires language. In their fifth year children could imitate a gymnastic movement when it was demonstrated, but not when it was merely described to them; a

year later one-third of them were as successful through following instructions as through direct imitation; a year after this, as many were as successful with instructions as with direct imitation⁽¹⁰⁾.

Language and Perception

We all know how language and perception develop after this for most children. As time goes on, language supplements, more and more powerfully, the work of the sense-organs; so that in the end words may play a larger part in a person's perception than what is contributed by his sense-impressions. For some people language is in fact a keener instrument of perception than the sense-organs. In well-known experiments with university students learning to solve a maze, although they all used verbal and visual and motor means of learning, the most efficient were those who made the greatest use of words^(8; 12).

Thus language may be the chief means by which the world comes to exist as a world of perceived objects. As G. H. Mead has said: "Language does not simply symbolise a situation which is already there in advance; it makes possible the existence or the appearance of that situation or object"⁽⁷⁾. This is putting it strongly—but not, I think, too strongly. All the evidence goes to show that normally language is an essential instrument of perception and so one of the chief factors in reasoning.

The absence or presence of language. Light is thrown on this by noticing what happens when language is absent or only partly present. When, for instance, a person uses words in learning to solve a maze, the words come to be mnemonics of the patterns of his movements in going through the maze. Head, in his study of aphasia, called these patterns 'schemata'—the words are symbols of schemata. But it is clear that often a person's schemata may be at work in his perception without his use of words for symbolising them⁽⁹⁾.

The evidence for this is particularly striking in cases where, from one cause or another, language is defective. Head, in fact, came to his notion of a schema from his observation that aphasics, suffering from impairment of language, nevertheless were influenced by schemata in their perception of things. He concluded that they used other symbols than words. What the aphasic does in his extremity, the rest of us do in some measure. As Bartlett puts it, "we turn round upon our own schemata"⁽²⁾; that is, we symbolise them for ourselves. But the symbols we use need not be verbal. Schemata may, for instance, be symbolised by a visual pattern. Thus Duncker showed that when a piece of green cloth was cut in the shape of a leaf it appeared greener than when shaped like a donkey⁽⁹⁾. Even if there was some naming here, it is difficult to avoid the conclusion that there must also have been some visual, non-verbal, schemata. This may happen

even in the process of generalisation, which is fundamental in reasoning. Humphrey, for instance, has brought together evidence that suggests that visual imagery may be used as a means of generalisation⁽⁶⁾.

But having said this, we must also recognise that, for most of us, the exclusive use of non-verbal symbols only permits of rudimentary generalisation. This is true even of children whose language is still developing. Some Russian workers have shown that when children of school age attempt to generalise from past to present situations, they find themselves impelled to use words in order to discriminate between the relevant and the irrelevant⁽¹⁰⁾.

The evidence today fully justifies the statement that perception and reasoning are normally mediated by language, and that the presence of language not only influences what we perceive but also determines what we remember of this. The evidence comes from the experiments of a considerable number of workers, among whom we may mention Bartlett⁽¹⁾, Carmichael, Hogan and Walter⁽³⁾, Gibson⁽⁴⁾ and Vernon⁽¹¹⁾. The general trend of their conclusions is this. When a person sees a picture or a diagram and afterwards tries to reproduce it, the reproduction is shaped not only by what he has seen but also, very markedly, by the words that occurred to him—or were said to him—at the time of the original perception.

Language and thinking. We come then to the recognition that, for most of us, language becomes essential in our thinking. In reasoning we adapt past experience to the present situation, and assimilate the present to the past. Language is, for most of us, the chief means of symbolising past and present. Thus we live, we perceive, we think, in a world permeated by words. This has no doubt been recognised since men first began to speak. It was expressed, once and for all, in the memorable remark that Plato put into the mouth of Socrates: "When the mind is thinking, it is talking to itself"⁽⁴⁾. What we have added to this in our own day is a vast amount of patient work which is gradually bringing home to us the details of the way in which the mind talks to itself and of the relation between this and thinking. Here the list of workers is so long that it would be absurd to attempt to name them. It is not too much to say that throughout the world this is one of the major topics of study and investigation in the field of human behaviour. Bertrand Russell has restated Plato's ancient dictum for us today with due caution: "Almost all higher intellectual activity is a matter of words, to the nearly total exclusion of everything else"⁽⁹⁾.

If this is true, its implications are profoundly important. It reinforces the growing belief that in attempting to measure scholastic aptitude by means of intelligence tests, we are measuring not only

(Continued on page 108)

Educational Ferment in the U.S.A.

EDMUND KING

IT IS A cardinal principle in semantics that a word or expression takes its meaning largely from its context. In the comparative study of institutions it is everywhere acknowledged that two institutions with the same name but set in different contexts are most unlikely to have the same character or functions. This may be true even of one particular, apparently uniform institution such as the Roman Catholic Church; the worldly status and rôle and the educational practice of that one Church vary greatly from country to country, as we can see by a quick glance at Eire, Italy, England and the United States.

For anyone intending to consider American schools these observations are of the utmost importance. Firstly, because there is no such thing as "the American school." There are only innumerable American schools, each with a personality and opportunities of its own. They are located in districts varying vastly more in their resources and

energies than any but the most cynical would readily believe, and distributed unevenly throughout the 49 states which are themselves sovereign in the overall arrangements they make for schools. Therefore "the American school as we know it today does not offer anything resembling fair and equal opportunities."⁽¹⁾ Secondly, any foreigner observing or reading about American schools is inevitably hampered by personal or national preconceptions about what "school" means, whereas the very idea "school" in the United States is something unique and peculiarly suited to the American context. Thirdly, whether the American *fact* which is a school does or does not measure up to the American idea "school" can be decided only in relation to the total circumstances which make American life⁽²⁾—for example, Americans' indulgence towards their children; American wastefulness (of food, cars, and juvenile years); the unreadiness of industrial organisation to absorb fully trained people before the age of about 25 or more; the fact that well over 75% of all Americans are at school after the age of 17, while about one-third of them complete their twenty-third year "in school"; the value placed by American society on differing types of skill—scholastic, technological, managerial, and social; the horizon of careers and ambitions open to educated persons, and thus profoundly influencing the recruitment and retention of teachers. In all these things American life is vastly different from our own and from any other, though it is interesting to note that the go-ahead British dominions are approximating more closely each year to "American" (i.e. industrialised) norms. All this means that no criticisms of the "common school" as seen in the United States are directly relevant to "common schools" anywhere else, unless the exact context is repeated there.

The Frontier Spirit

There are a few more important facts to be borne in mind by observers of the United States. Though Americans are generally supposed abroad to be boastful "boosters," their very mobility and "forwardness" leave them filled with disquiet, resulting in passionate self-criticism in reflective moments. Hence books like *Quackery in the Public Schools* and *Why Johnny Can't Read* were best-sellers before sputniks seemed possible. Moreover, the restless spirit of the frontier and of the business promoter makes them ready to scrap

(Continued from page 107)

inborn capacity but also the effects of a child's social environment through the medium of linguistic communication. It reminds us of the special functions of language in education, and impels us to consider whether the everyday practice of our schools makes adequate recognition of the complex relationships between language and all the other factors in the development of children.

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- (¹²) Warden, C. J. 1924. *J. Exp. Psych.* VII.

(¹) F. M. Hechinger, *The Big Red Schoolhouse* (1959), New York.

(²) E. J. King *Other Schools and Ours* (New York, 1958), Chapter 5.

today's apparatus (let alone yesterday's) in favour of something more effective. Schools are not exempt from this ballyhoo. To accentuate the process, the schools belong to the parents in the sense that they are community enterprises, are extremely sensitive to electoral or directly parental suggestions, and have long had a tradition not of upholding the Establishment but of preparing for tomorrow—tomorrow on the spot. Yet the very fact that education is so localised, topical and sensitive that it has resisted development from the state not to speak of the Federal level has actually resulted in its lying open to three other very powerfully standardising and enervating influences.

The first of these is the advanced logic of industrialisation, the essence of which is the standardisation and interchangeability of parts. In an almost incredibly mobile country this may mean that one "part" of education picked up in one emporium is reckoned to be much the same as the same article supplied somewhere else. Furthermore, all the bits are at roughly the same price in the various self-service stores, which is what high schools tend to be. How do they become standardised? Well, there is the consumer demand, say, in California for an article which became familiar in Iowa; but the very fact that it is familiar has arisen because there has been an absolute explosion of the provision for high school education since the turn of the century, resulting in techniques of supplying a mass demand in terms of mass production. Everybody must have it. Everybody must "get there." Therefore it does not matter much whether they get there by the latest Cadillac or an ancient (i.e. five-year-old) Chevrolet. They are all cars. So 9th-grade Latin like 9th-grade Home Economics or 9th-grade workshop or any other corresponding package is "equivalent" education. It is a "unit." People "get there" by these, whether we are thinking of high school graduation or of a well-paid job and first-class citizenship. There are inequalities and privileges, of course; but they are minimal from a child's point of view. There is little "flunking out" or "quitting" school prematurely; and there are no hatches battened down overhead. Furthermore school (in our sense) leads end-on to university or some other college, with hardly a suggestion of a bottleneck.

Teachers and Professors

Who are the purveyors of these standardised wares? Obviously, the teachers in the first place. They are mostly women. Their salaries are low: city elementary school teachers average out much lower than a railway guard; and high school teachers and university lecturers average much less than a railway engine driver.⁽³⁾ Therefore teaching is

increasingly regarded as a part-time or part-year job.⁽⁴⁾

The second order of purveyors is made up of college professors (i.e. all academic staff) of "Education." These are distinct from, and usually considered to be greatly inferior to, professors of anything else. The education of teachers (you must not say "training") is more often than not conducted in colleges of Education (within universities, but mainly operating below the graduate level which they attain after four years) or in separate teachers' colleges which also confer degrees but are seldom of a status or esteem comparable with that of universities or their departments. There is no standard pay for these people; consequently professors of Education can seldom bargain for as much as other professors. Many college "full professors" are paid much less than many high school teachers.

College Courses

To answer the need for all the teacher-trainers required by the immense expansion of the schools, former teachers or other pedagogically inclined professors build up big establishments eager to be recognised as respectable. Some expansion is by Parkinson's Law; some is required by the super-market organisation of most universities. Therefore there are courses (and naturally professors) specialising in "Routine classroom administration," "The public relations of the school," "Family life education," "Music Education," "English Education" (distinct from Music, English, etc.) and so on. "Professionalism" so often means an inflation of dignity, which may arise from time spent on the course. A great many college courses for intending teachers are of the "how to do it" variety. From these points comes much of the criticism offered by people like Arthur Bestor, R. M. Hutchins, and (to tell the truth) most top-level educators who are not in "Education."

Then there is the textbook industry. Publishers supply the 1,850 colleges (many of them very large) with "the book for the course" and an abundance of other appropriate offerings. Quite apart from the ubiquitous cult of Dewey (who after all stood for much that was suited to the Americans' circumstances), the "industrialised" organisation of most colleges and reliance on all-too-similar course-tailored textbooks mean a vast amount of unsuspecting conformity without much of a really personal stand in most places—indeed, without much real account taken of shifting tendencies and needs in American education by the people most immediately concerned.

⁽³⁾ A. G. Korol. *Soviet Education for Science and Technology* (Massachusetts Institute of Technology and Chapman & Hall, 1957), p. 308.

⁽⁴⁾ R. Moley. *Status of U.S. Teachers* in *Newsweek*, 6th October, 1958.

A kind of intellectual isolationism, not absent from most American thinking, is particularly circumscribing for those concerned with the preparation of teachers—and therefore, of course, for the majority of the teachers themselves. This is partly due to a lack of appreciation of the perennial and universal problems of mankind, and to an excessively parochial view of the context of the American child; but it is also caused by the special, elaborated creed of “progressive” teachers in the United States. In any actual activity of life Americans are never afraid to jump in at the deep end; but those responsible for the education of children nearly always hesitate to obtrude their own personality or the concerns of the outside world, on the ground that what matters is “how to learn” (“process” in the jargon) in terms of the child’s own experience and interests almost exclusively. Then of course American teachers only need to look back or around them to see what immense strides their common schools have taken in the education of a nation; so they feel well satisfied with what they attribute to “progressivism” in schools. Therefore external constraints (facts, subjects, a non-American world, or even the actualities of the U.S.A. outside one’s own particular state) may be minimised. Hence the plethora of offerings of the do-it-yourself-in-your-own-combination-in-your-own-time variety—with of course teacher-education and books to match.

American self-criticism has never had such a holiday as in recent years, particularly in relation to the schools. The more thoughtful critics have been concerned with the really fundamental influences which I have stressed here—those arising from the impact of industrialisation and urbanisation on our notions of human personality and its development. (Under this head we might list especially D. Riesman’s *The Lonely Crowd and Individualism Reconsidered*, and W. H. Whyte’s *The Organization Man*). Then there are those who have criticised the automatism and conveyor-belt procedures of the school itself: R. M. Hutchins, especially in *The Conflict in Education* (1953); M. J. Adler and M. Mayer in *The Revolution in Education* (1958); F. S. Chase and H. A. Anderson (editors) in *The High School in a New Era* (1958); J. B. Conant in *The American High School Today* (very cautious) (1959); and very many others. There is a third group of critics mainly reacting to Sputniks and other non-American phenomena; the latest is H. G. Rickover in *Education and Freedom* (1959). A fourth onslaught has come from A. Bestor and such partisans as the Council for Basic Education, who look for more knowledge and serious endeavour in teachers and pupils. There is also an important group of champions of the common school in the U.S.A. who nevertheless want (a) both a flexibly differentiated “setting” of pupils and subjects so as to encourage bright children, and hard work, with

complementary rather than automatised education; and (b) an awakening of the American people to the priorities implicit in a democratic society and its schools. These include especially I. L. Kandel and R. Ulich. Some (but only a few) educators recommend a much more selective differentiation between children by means of distinct types of school or department, like P. Woodring in *A Fourth of a Nation* (1958). Hardly any of the above criticisms are aimed at the common school as such.

To overlook the ding-dong battle of which newspapers and magazines are full, we can also note the criticisms implicit in action. These range from the deliberate migration of parents into districts with good (but still common) schools to programmes such as that of the teacher-education experiments conducted by the Fund for the Advancement of Education. There are several such trusts, which also spend vast sums on research concerning new aids to teachers (e.g. closed-circuit television; “expert” lessons by superb teachers, to be communicated and worked over by minor teachers; ancillary services in schools; and so on). There are also increasing opportunities for early admission to universities for bright and industrious pupils; there is a slow increase of streaming in schools; there are selective schools; there are special schools and various supplementary programmes for future geniuses; there is some increase in the number of private schools (which, if we exclude the totally non-assisted denominational schools, have always been a negligible proportion of the school provision). There are innumerable commissions and colossal researches.

We must finish. The weaknesses of American education are clearer to Americans than to us. They arise from varied causes: (a) localism and its inadequacies; (b) a sudden, vast supply of mass education by industrialising the schools; (c) emphasis on doing, “going places” and know-how; (d) a reaction against fictitious “values” and restraints in Europe because of American liberation, “the frontier,” and so on; (e) the abundant non-academic opportunities for educated people; (f) the low status of teachers by American standards. Yet we must make no mistake about it: the average American parent or teacher seems much more concerned about education as an aim than most English parents or teachers. He wants to improve the schools as they are, and not to return to largely discredited European school systems which ignore the recommendations of European philosophers and in any case fail to educate most of the population. He wants the American school, the common school, to be improved. The school domain has been hastily “covered” as the continental settlement was pioneered. Americans now look forward to a more intensive cultivation of its resources.

Book Reviews

Soviet Education Today, by Deana Levin. Staples Press (1959), 170 pp., 15s.

Speech and the Development of Mental Processes in the Child, by A. R. Luria and F. Ia. Yudovich (trans. and ed. by Joan Simon). Staples Press (1959), 126 pp., 15s.

FEW PEOPLE, EVEN educationists, seek the effort of studying other educational systems for their own sake, like collecting foreign stamps. But there are other reasons why books such as those under review, about Soviet education and educational psychology, should arouse widespread interest. Our interest in a massive educational achievement, indicated by striking scientific and technological successes, has only been whetted by articles in journals and the reports of authoritative delegations. In particular, administrators and teachers now striving to provide increased educational opportunities for their pupils want to know more of the experience gained, albeit under very different circumstances and with very different traditions, in a country where educational provision is on a vast scale. Hence the importance of two very different books recently published.

Soviet Education Today, despite its modesty of size and style, is something of a *tour de force*. To produce, in 125 very readable pages, a remarkably complete survey of the entire school and pre-school system, the formal and informal aspects of educational activities, the training of teachers and the work of the Academy of Educational Sciences, and to bring the whole to life in terms of aims, methods and classroom realities—by continual illustrations from first-hand experience, conversations with teachers, pupils and administrators—demands a very special authority.

Miss Levin has just the necessary kind of experience. An enthusiastic and experienced mathematics teacher and textbook writer, she speaks Russian fluently, taught in Soviet schools for five years before the war and has visited innumerable schools and institutions all over the U.S.S.R. in recent years. In preparing this book she has had the closest co-operation of the Academy of Educational Sciences, the Union of Educational Workers and many leading Soviet educationists. Of particular value to teachers are some fifty pages of appendices covering the curricular plan and time allocation, syllabuses for all subjects and specimen school leaving examination papers.

Speech and the Development of Mental Processes in the Child, by the distinguished Soviet psychologist, Professor A. R. Luria, is a scientific work of significance to educationists as well as to psychologists, as the Professor of Experimental Psychology at Cambridge points out in a foreword.

At first sight only a detailed analysis of the retarded speech and mental processes of a pair of identical twins, and the changes brought about by an educational experiment, this book is of general interest because of the light it throws on the key role Soviet psychologists assign to speech. This notion is so new to most of us that perhaps I may be forgiven for concentrating on the brilliant opening section of the book, which outlines the general approach made to this subject.

BOOKS OF INTEREST

Soviet Education Today DEANA LEVIN

"A fascinating book." *Sunday Express*.
"A useful reminder of the formidable progress in Soviet education over the last forty years. Taut, comprehensive and straightforward." *New Statesman*. "There is plenty to make a Westerner think." *Times Literary Supplement*. 15s.

Speech and the Development of Mental Processes in the Child A. R. LURIA and F. I. YUDOVICH

Introduction by Professor Oliver Zangwill.

A book which will appeal to psychologists and workers over a wide field. The authors report a systematic study of the development of speech in a pair of identical twins and also throw interesting light on the parts played by heredity and environment respectively in the growth of mental life. 12s. 6d.

STAPLES PRESS
29 GREAT PORTLAND STREET, W.1

Of course educationists here have long been aware that speech is important. But, in practice, either the fatalistic view is taken that poor speech is the result of low intellectual ability, about which little can be done, or speech is treated as a separate factor, the poor development of which may obstruct the expression of otherwise fully developed intellectual processes, but which can be dealt with by purely mechanical speech training.

A vastly different conception of the role of speech has arisen from the investigations into mental development in which Professor Luria and his colleagues have been engaged for many years. These indicate that mental processes—far from expressing some pre-determined, inborn and unanalysable quality, or from being, in behaviourist terms, mere elementary motor habits inculcated by training—arise from concrete forms of interaction between organism and environment and are subject to close analysis; that these processes are formed in the course of the child's development, at each stage of which he is presented with new tasks, demanding new forms of activity, which in turn give rise to new and more complex mental processes.

In this sense human mental development, as distinct from that in the animal world, arises not merely from the individual's direct sensory experience (Pavlov's "first signal system"), but from activity in a complex social environment from which the child derives a far richer legacy of experience in the very process of hearing and developing his own speech (and, with it, the mental processes included in the Pavlovian term "second signal system").

This is to refer not merely to the obvious role of language as a means of communication, but to the conception of words as themselves the embodiment of human experience, and of their acquisition and use as deepening and reorganising the mental processes. Here is a conception of learning, not as something added externally, but as something which *changes* human beings. It is the adult who influences the small child in this fundamental sense, educates him, with every word spoken. "By naming objects, and so defining their connections and relations, the adult creates new forms of reflection of reality in the child, incomparably deeper and more complex than he could have formed through individual experience."

The word not only refers to a single external object, with particular attributes, it abstracts its essential qualities and thus relates it to other similar objects, i.e., it generalises; a cup is a cup for drinking, whether black or white, large or small. The word is, therefore, a 'tremendous tool,' preparing the way for, and essential to, complex mental processes of analysis and synthesis which could not otherwise be developed. In the same way, the very structure and grammar of languages embodies a vast, accumulated social experience of external realities, relations and processes; of these, only language can make the individual conscious.

It is, furthermore, language which makes sustained, conscious and purposeful activity possible. At first it is the adult's world which regulates the child's actions, operates as a "regulator of behaviour." But the child, in acquiring words, acquires also a system of instructions which he can eventually use to regulate his own voluntary behaviour. Only when he becomes able to define

his aims, and indicate the means of achieving them verbally, can he subordinate his activities to this verbally elaborated plan, i.e., he is capable of carrying out purposeful activity directed to a specific end.

Thus speech, in the view of Professor Luria and his colleagues, is not merely a by-product of intellectual development, or a separate factor, but itself plays a key and dominant role in general mental development. The vast educational implications of this conception, which is made much more precise and concrete by the investigation described in the remainder of the book, calls for the attention of educationists everywhere. It has already been defined to a stage where it can do much to illuminate the practical problems of teachers.

S. F. FISHER.

The Young Devils, by John Townsend. Chatto and Windus (1958), 217 pp., 15s.

WHEN I GLANCED at the sub-title to this book—"Experiences of a School Teacher"—I hoped to be amused and entertained. I was not disappointed. Easy to read, it is written in a manner overtly cynical yet covertly sympathetic.

With London as his background, Mr. Townsend describes many incidents which have enlivened his daily routine as a teacher in "difficult" modern secondary schools since he entered the profession after the second world war. His experiences will bring wry reminiscent smiles to the faces of many teachers, especially those who have toiled in modern secondary schools in industrial areas. His tale of the missing staff raincoats, his account of the visit of the Inspector, his description of the lesson on sex which he was called upon to give to a class of adolescent girls, and his comments upon speech day, are some of the highlights of the book.

To regard this book, however, merely as yet another collection of amusing anecdotes is to misunderstand completely Mr. Townsend's intentions. Here is a teacher—and, one suspects, a successful one—seriously disturbed by the atmosphere of apathy, ill discipline and frustration he has found in modern secondary schools in which he has taught, and anxious not only to draw attention to these problems but to stimulate action for their eradication.

He lays stress upon the pressing need to improve both the buildings and the amenities of modern secondary schools, in order to make these schools modern in fact and not merely in name. That good buildings and ample facilities do have a marked beneficial influence will be readily admitted by all who have seen the transformation in the attitude of pupils transferred from antiquated and inadequate premises to new ones.

Good buildings alone, however, do not necessarily provide a good school, as Mr. Townsend is aware, for he rightly lays emphasis on the imperative need to appoint as headmasters men who have the ability to understand and to be sympathetic to the environment and the aspirations of their pupils, and who have the vision to develop the work and to use the amenities of their schools to provide an education which is purposeful and satisfying. Mr. Townsend's strictures upon his caricature of a headmaster are meant as a warning to appoint-

BOOK REVIEWS

ing authorities : perhaps they will stimulate healthy self-examination among existing heads.

The author does not attribute all the weaknesses in the schools of which he has had experience to poor buildings, inadequate facilities and unsuitable headmasters. Throughout this book he illustrates the detrimental effect of frequent changes in staff, far too common a feature of many schools to-day. Mr. Townsend leaves one in no doubt about the urgent necessity for a settled and sufficient staff; without this it will not be surprising if "difficult" schools become not only "more difficult" but perhaps "impossible."

In spite of an excusable tendency to overdramatisation and exaggeration, this is an amusing and provocative book, providing much food for thought for all interested in the education of children.

M. ROWLANDS.

The Teacher's Book of Nature Study, by G. D. Fisher, with a section on marine biology by J. C. Smith. W. and R. Chambers (1958), 328 pp., 35s.

THE AUTHOR—the "Hutman" of the B.B.C.—is one whose interest in plants and animals caused him (originally a business man) to spend his whole time in nature study. For ten years he has worked for Education Authorities, speaking to children in schools and school camps, organising school nature groups and conducting nature study courses for teachers.

His method is to encourage the active study by children in their own time of living organisms in their natural

habitat as well as in the class room. The purpose of the actual lesson-time is to arouse interest in observation, to supply a sufficient knowledge to help in the identification of the larger groups, and to emphasise the importance of methodical labelling of specimens, dating of observations and the taking of rapid notes on the spot. This material gives a foundation for the understanding of modern biological concepts.

In the introduction he contrasts the conditions of country and city schools; his belief that city children can and do have opportunities which will allow them to make just as good nature observers as country children is an interesting challenge to teachers in large towns. He also maintains that lack of knowledge at the beginning in a teacher of nature study should form no difficulty—that the infectious enthusiasm to "find out" and the ability to use books of reference are the most useful qualities the teacher can have.

The chapters take the form of lesson material based on experience of half-hour lessons, each containing rather more than sufficient work for a single period, to allow for selection. There are delightful coloured illustrations of simple blackboard work specially drawn for this book by the author's wife. There are different sections on insects, birds, mammals, freshwater life, plants (phanerogams only, disappointingly) and a very comprehensive one on marine biology by Dr. Smith. Each section contains very practicable and useful directions on methods of study in the field and the approach to the larger animals in the wild. This is a noteworthy feature. The suggestions for keeping and rearing small animals in the classroom are equally exact.

THE TEACHER'S BOOK OF NATURE STUDY

by
G. D. FISHER

In this handsome volume the author describes his methods whereby he has enabled teachers and children all over the country to enjoy Nature's secrets at first hand.

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Although Mr. Fisher explains that the book was written as a result of lessons given in primary schools, a small selection of some of the subjects discussed will show its usefulness as a foundation for the ordinary level biology course in secondary and grammar schools. The subjects include : metamorphosis in insects; methods of movement and flight; comparison of insect and arachnid characters; the aeration of water, variation in brackishness and rate of stream-flow with their effect on communities; flower structure; secondary thickening of trees; fruit dispersal mechanisms ("hitch-hikers and stowaways"); food chains and the importance of plankton; zonation of the seashore; camouflage and counter-shading; external structure of fish—and very many more.

At the end of the book there is a lesson syllabus giving material required for the following week's work, a good reading and reference book list, and advice to children when visiting the country. The outstanding value of this book is the author's unique combination of intimate practical knowledge of the observation of animals and plants, his scientific attitude to their studies (although he claims to be no scientist), and his experience of classroom work and class teaching. It is not only an interesting and lively book for a layman to read, but also valuable to experienced teachers in the practical help it gives. It will be invaluable to young teachers, especially those themselves brought up in town, with not so extensive a knowledge of nature study as they could wish.

M. E. MOORE.

Trends in English Adult Education, edited by S. G. Raybould. Heinemann (1959), 258 pp., 21s.

THESE ARE NINE studies of "the changes which are taking place in adult education," all but two of them by adult educationists from the University of Leeds. There is a great deal of food here, statistical material and information about very varied activities; there is also food for thought, in judicious surveys of the controversies which are the lifeblood of adult education.

J. F. C. Harrison in *The Workers' Educational Association in the Welfare State* and Roy Shaw in *Controversies* deal with a great mass of conflicting ideas. It is not necessary to agree with all their conclusions to appreciate the succinct quality of their writing. Contributions like N. A. Jephson's *The Local Authorities and Adult Education* and the editor's *Changes in Trade Union Education* are more simply informative. The two contributors who do not come from Leeds, Guy Hunter, in *Residential Colleges for Adult Education*, and Jean Rowntree, in *New Issues in Educational Broadcasting*, seem most fresh in their thinking, but this may be because these are less familiar fields to the present reviewer. There is no doubt that this volume will fascinate and provoke to thought the student, tutor or administrator who has experience of adult education.

What about the larger body of educationists and others, who do not know adult education from within? There is a real sense in which this book may be dangerous. It provides an excellent Yorkshire dinner—roast beef and Yorkshire pudding, apple pie and Wensleydale—but this is not the whole art of cooking. A Yorkshireman whose experience of adult education is in the

Eastern Counties may, perhaps, point to the regional one-sidedness in parts of this book. Is Madingley Hall not a residential college? It is not mentioned by Guy Hunter. Is University Extension really "in a better position" than the W.E.A. to pioneer synoptic courses? The W.E.A. summer school at Cambridge has had a fortnight's synoptic course every year since 1949. These are only isolated omissions from one area but one wonders how many other areas of the country have been similarly neglected. This excellent Yorkshire pudding does not provide a balanced diet; these essays do not tell the whole truth about English, never mind British, adult education.

There is a more serious lack of balance. The editor claims that "no attempt has been made . . . to secure that they (the contributors) write from a common point of view." In one respect this is unfortunate. University adult education is organized in two main ways, in collaboration with the W.E.A. and through University Extension. Naturally there is sometimes friction and competition; those who intend adult education well will surely try to minimize causes of conflict. Unfortunately the essay on the W.E.A. discusses the movement critically and presents its difficulties, while J. W. Saunders writes ebulliently and naively in *University Extension Renascant*; here alone in the book one senses 'line-shooting.' The result of these two totally different approaches is, of course, to present a quite false picture of the real balance of achievement between the two sides of extramural work.

The outsider might well comment after reading this book : what a lot of pother about such a small number of people! One tutor is said to have remarked that there is probably only one student in the country for each word in the book. Only Jean Rowntree and W. P. Baker in *Informal Adult Education* refer to adult education for the millions; the editor in describing trade union education skims round this aspect. Nowhere is the possibility faced that much of the heartache of the voluntary movement and many of the headaches of the professionals may really stem from the failure of adult education in Britain, as yet, to touch more than a small élite.

LIONEL M. MUNBY.

BOOKS RECEIVED

(Mention in this column does not exclude a future review)

<i>The Social Purposes of Education</i> K. G. Collier	Routledge and Kegan Paul	21/-
<i>Race Prejudice and Education</i> Cyril Bibby	Heinemann	7/6
<i>Selected Poems of Samuel Coleridge</i> Taylor Ed. James Reeves	Heinemann	8/6
<i>Selected Poems of Emily Dickinson</i> Ed. James Reeves ..	Heinemann	9/6
<i>Contemporary English Poetry</i> Anthony Thwaite	Heinemann	10/6
<i>Measure for Measure</i> Ed. James Winny	Heinemann	6/9
<i>Trigonometry for Today</i> Brooks, Schock and Oliver	McGraw-Hill	33/-
<i>Educational Research</i> , Vol. I, No. 2	Newnes	5/6
<i>Know the Game : Sailing</i> Look Books Series (Nature Activity Readers), <i>The Robin Redbreast</i> ; <i>The Red Squirrel</i> ; <i>The Swan</i> ; <i>The Rabbit</i>	Philip and Tacey	2/-
<i>East London Papers</i> , Vol. I, No. 2	University House	5/-

Youth in a Technical Age, by D. M. Silberston. Max Parrish (1959), 228 pp., 21s.

THE 1918 EDUCATION ACT laid upon L.E.A.s the duty of establishing day continuation schools at which attendance would be compulsory for all workers under the age of 18. In 1944 another Act provided for the attendance at County Colleges of young workers for one day per week, 44 weeks of the year, or for a time equivalent to this. By 1957 only 21.1%, about four-fifths of whom were boys, of the insured employed under 18 were attending day release classes. And for this the students are dependent not upon the above Acts, but upon the whim or foresight of their employers. One result is a heavy preponderance of vocational studies. In 1955-56 students acquiring knowledge directly connected with their work outnumbered the others by six to one. Even then the average day release student receives only two-thirds of the 330 hours instruction per year envisaged in the 1944 Act.

For the revelation of such facts we must be grateful to Mrs. Silberston. Her book, an examination of day release, has thrown valuable light on a neglected corner of the educational field, and one beset with many problems. We should not, for instance, be too impatient of the strong vocational bias. Students under 18 are intensely practical minded, and we are invited to consider the attitude of a youth towards liberal studies inflicted on him during the day when, on three evenings per week, he must still attend classes in order to obtain technical qualifications. One solution is that adopted by the Post Office where, we are told, junior technicians who spend a whole day on vocational studies may also devote themselves on a further day to general studies. But, by comparison with most firms, the Post Office appears as singularly enlightened.

Clearly desirable is a more liberal method of teaching vocational subjects—but many teachers in further education have had no training as teachers—and the incorporation by examining bodies of liberal subjects into their requirements. Even more clearly desirable is the implementation of the day release provisions of the 1944 Act. The present voluntary 'system' has served a useful experimental role, but, as Mrs. Silberston comments, it is one "slow to develop, unbalanced in scope, even in the vocational field; it will leave many workers untouched . . . is unlikely to give adequate facilities to girls, and will probably never embrace the mass of unskilled workers."

GEORGE GRAINGER.

World Without War, by J. D. Bernal. Routledge and Kegan Paul (1958), 308 pp., 25s.

PROFESSOR BERNAL'S BOOK is concerned with the potentialities of science for human welfare, if the energies and resources now devoted to war preparation and research could be diverted to peaceful uses. The picture he paints is remarkable. The speed with which the developments now possible might be implemented depends partly, of course, on the availability of trained and educated men and women.

A fascinating chapter, "Education and Research for the New World," very relevant to the kind of problems that FORUM is tackling, deals with this question in some

Changing Schools

The effect of selection on the primary school and an examination of possible alternatives.

Contributors

EDWARD BLISHEN	L. P. S. MILLER
H. RAYMOND KING	ROBIN PEDLEY
M. M. LEWIS	HARRY RÉE
LADY SIMON OF WYTHENSHAW	

Changing Schools, published by the Council of Children's Welfare, may be obtained from the Secretary, Council for Children's Welfare, 54 Platt's Lane, London, N.W.3.

Price 2s. 6d. post free

detail. With the aid of "Educational Flow Sheets," showing the situation in various countries, together with occupational estimates over the next 50 years, Bernal shows what developments are necessary. In his view the new circumstances demand "education of the mass rather than of a selected *élite*"—to achieve this, large-scale study and research is needed into content and methods; in particular, a significant reduction of purely factual teaching must be brought about.

From now on, the emphasis must be on the discovery of knowledge, rather than on the passing on of established truths; education must show how to criticise and discover new truths, must concern itself with the active part of the scientific method. In short, the potentialities of scientific advance demand a transformation from educational transmission to educational creation. "The objects of education should be first to detect, secondly to bring out and thirdly to train the capacities of creative thought."

B.S.

English Workshop, by Alan Durband. Hutchinson Educational (1959). Books 1 and 2, 4s.; book 3, 4s. 6d.

THESE ARE THE first publications of Hutchinson Educational Ltd. The three books of *English Workshop*, by the senior English master at Liverpool Institute High School, provides a course in grammar, vocabulary and comprehension, designed to meet the requirements of G.C.E. Their aim is avowedly utilitarian: "To provide practical material in the basic English skills favoured by the examining boards."

The material is drawn from contemporary sources, ranging from Gilbert Harding and Stirling Moss to Graham Greene, W. B. Yeats and Stephen Spender—the Russian sputnik provides the matter for the first lesson in parts of speech. The third book in the series consists entirely of test papers on the model of the G.C.E. "O" level examination, together with reprints of past questions set by the principal examining boards.

J.F.



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your entry?*

*... and your
Project Study
Kit?—Price 5/-*

To Australia Visit Competition, East Ardsley,
Wakefield, Yorkshire

Please send me details of the
Australia Visit Competition (flying
round the world with Qantas).
