

Fractions in Terms of Number

Instead of colour, now introduce symbols $\frac{1}{2}$, $\frac{1}{4}$, etc., and show that what was true when using colour, is also true when using number. (Refer to Cattegno's "Arithmetic with Numbers in Colour" Introductory Stage, Book I, page 24 and "Teacher's Introduction to the Cuisenaire—Cattegno Method of Teaching Arithmetic" page 35.)

When teachers wish to teach the basic mathematical ideas from 10 to 20 and beyond, the teacher will create situations showing that concepts which have been formed and expressed with numbers below 10 also apply to numbers above 10. In other words, use the same approach for numbers from 11—20 as was used for numbers below 10.

Progress of Children

Throughout the year children will be working at different stages, and by the end of the year many might well have outstripped the rest of the class. It appears, therefore, that teachers would have to keep an individual record of each child's progress in Arithmetic. This record should pass up with the

child, so that the new teacher is immediately aware of the child's ability in number work.

From time to time fantastic claims have been made for the colour rod system. Any person who has not used the rods would be quite entitled to look upon many of the claims as being impossible, but once they have used the rods, they too, will see what possibilities exist when this system is used. This does not mean that children should be submitted to various forms of "mental gymnastics". Understanding comes with maturity, and this must always be borne in mind.

REFERENCES

- (1) "Course in Pure Number". Based on Cuisenaire/Cattegno Methods. (This was reproduced for the Federal Ministry of Education, Rhodesia and Nyasaland. By the courtesy of the Education Department of Victoria, Australia.)
- (2) "Arithmetic with Number in Colour" Books 1, 2 and 3.
- (3) "The Young Mathematician". Introductory Book and Books I and II by C. E. D. Birrell.
- (4) "Colour-Factor Mathematics". The First Year Part I and II and "The First Year". Teacher's Handbook by H. A. Thompson.

BOOK REVIEWS

World Perspectives in Education

Edmund J. King (Methuen).

University Departments of Education and Teacher Training Colleges should examine Dr. King's latest book, which as a study in comparative education and a most perceptive analysis of the less frequently recognised problems that beset us, represents quite one of the most lucid and well-informed surveys we have seen. His range of interest is wide; he devotes, for instance, many pages to the question *Who is Educated?* He examines the impact of technological change on our traditional ways of teaching. He considers the world-wide problem of teacher recruitment and training. He finds it strange that "most parents and politicians do not *effectively* demand a better or different education for most of the population than it now receives . . . for industrialists are convinced that before 1980 there must be a rapid shift towards a more highly skilled labour force;

but the nation's leaders have not translated this conviction into terms of popular education." Britain's teacher shortage in 1961 was 90,000, and experts calculate that—as advanced thinkers in South Africa have always proposed should be done—classes should be reduced to a maximum of 30 children. But to effect this, 110,000 more teachers would be required in Britain by 1965. Dr. King, who is a lecturer in Education at the University of London, comments that the teaching profession must look forward to a decreasing popularity and a general worsening of quality in its new recruits. "That seems bound to happen," he maintains, "unless prospects and esteem are greatly enhanced. The sort of bright young man or woman who in France or Italy would have become a secondary school teacher now tends in Britain and the U.S.A. to dash off and join the managerial or scientific 'power' elite. It is undoubtedly true that many grammar school heads in Britain implicitly assess the teaching profession very

low by channelling into it the duller boys and girls among the sixth formers. Of course, they are thinking of admission to the teacher-training colleges, which do not rank with the universities."

Dr. King has a section on *Ideologies and Systems of Control*, which is most stimulating and helpful. Discussing censorship, he asks . . . "but have we always done well when we close young minds not simply to bawdiness but to a balanced view of human emotions and prospects as they are? To go one stage further, are we to agree with Plato that Homer and other masterpieces shall be banished from our schools because of the unseemly behaviour of the gods as there described?"

Very interesting is his survey of modern Holland where he points to the tremendous power of ideological disruption. In Holland there are Calvinist Boy Scouts and Catholic Boy Scouts—as well as a secular equivalent. There is a Calvinist trade union, a Catholic trade union and a left-wing, secular trade union. "Children," comments the author, "tend to find their playmates and school companions not in accordance with the class or local distinctions of other classes but by ideological criteria."

There is a very useful chapter on family change, and throughout the book wide and informed reference to educational problems and practice in other European countries, Russia and America. The style is easy, the author's personal idiom pleasant and there are innumerable useful references and authorities that can be followed up by those interested in some particular section of this most readable and informative book.

Discipline Without Punishment

Oskar Spiel (Faber).

Many educationists tend to enjoy the rebellions of educational non-conformists, although few have any intention of sharing their escapades with them. Not many of us have either the patience or essential goodness of spirit to join the Summerhill staff. Mr. A. S. Neill, whose book is reviewed elsewhere in these columns, is another teacher who feels, with Dr. Oskar Spiel of Vienna, that corporal punishment in particular is a confession of failure. Professor Spiel is the interesting phenomenon of an academic figure of repute who actually runs a school and handles the day to day problems involved in it—a fact that may free him from the common enough accusation of being one of those psychologists who are all very well in theory but who break down in the hard testing of the daily round.

Professor Spiel's approach is based on the teaching of Adler, one of the first of Freud's disciples but one who broke away from him. Adler felt that it was not in the past that one must look for an under-

standing of a person's problem behaviour, but rather in the future. What was the person striving towards, what were his goals? Unlike the Psychoanalytic School, he felt that there were other methods of treating mental problem than the patient-doctor relationship involved in the Freudian approach. To some extent Adler was a pioneer of modern group methods—methods well suited for the society of a school, where individual methods are far too costly.

Professor Spiel was personally with Adler for some time, and since the downfall of the Third Reich he has done much to provide a pattern of return to that sort of education which seeks rather to develop than to enslave the minds of children.

Modern teachers may at times find his approach a strange combination of old-fashioned moralistic methods, Adlerian goal-responses, and the idea of functional social interaction. But whatever one's reaction the book is worth study. Three cases are presented in reasonably full detail, so that one is able to watch Professor Spiel translate theory into practice. Much less individualistic in approach than Neill, Professor Spiel does not seem quite to have solved the problem of individual privacy—the ultimate need of all of us for an area of our personality that is beyond social control and influence. It is probably from this area than of personality that a great deal of leadership stems, and certainly much that we class as creative. In fact, by rejecting in practice the unconscious in the Freudian system Professor Spiel has not only simplified his approach: he has over-simplified it. Nevertheless, this educational experiment in Individual Psychology at the Experimental School in Vienna should attract the notice of all teachers who are alive to modern problems.—B.W.R.

The Albemarle Book of Modern Verse for Schools

ed. F. E. S. Finn (John Murray)

In approaching this assessment one is aware that in the hands of another writer an entirely different and opposed view might have been offered. Editor and reviewer both believe that in the mid-forms of the Secondary (or High) School the teacher of English will succeed far better with his poetry lessons if he uses modern writing. The tendency in South Africa, and indeed in many parts of the English-speaking world, is to ignore most poetic experience after Tennyson. The result is a sense of complete unreality for the greater majority of modern pupils, for such an attitude excludes the idiom and content of modern life—a situation that can be remedied by the wholesale introduction of youth to poets of their own time. Such a course does not—as some of the rear guard occasionally protest—cut the modern