

BOOK REVIEW

The book reviewed here is *Mathematics in Primary Education; Learning of Mathematics by Young Children*. It is prepared by the International Study Group for Mathematics Learning, Palo Alto, California, compiled by Dr. Z.P. Dienes, Professor of Education, University of Adelaide, Australia, on behalf of the International Study Group, and published with the permission of UNESCO, 1966.

The book should be available from

UNESCO Publications
University of Toronto Press
Toronto, Ontario.

The address of the source organization is

UNESCO Institute for Education
70 Feldbrunnenstrasse
2 Hamburg 13
Federal Republic of West Germany.

This book of 164 pages is an illuminating report on recent research into the learning of mathematics by young children. It is compiled and integrated by the psychologist-mathematician Zoltan P. Dienes out of the proceedings of three international conferences called especially to discuss new developments in elementary school mathematics.

The report is biased, in the sense that the theoretical and procedural perspectives of Dienes are ever present as the integrating frame of reference. However, as one reads the report such a bias transforms into a distinct benefit; it becomes increasingly evident that much of the insight manifested in the report is as much a product of the bias as it is of the results reported.

The latter do not constitute the contents of a typical methods book on the teaching of elementary school mathematics. Rather, they constitute some of the significant findings of research, of which all good methods books must take serious cognizance. Accordingly, no

recipes will be found. The report contains only the latest discoveries of master chefs experimenting to find the whys and hows of the processes prerequisite to the creation of better recipes.

Much of the report concerns itself with the whys and hows of creating good physical embodiments of mathematical concepts, such as number systems (integers), vectors and operations. Many ingenious embodiments are discussed, and several principles of how these physical embodiments can be used best to teach the concept are suggested.

The book is not exhaustive, nor does it pretend to be. It does, however, give a good picture of how the frontiers of knowledge are being extended - knowledge of how young children learn mathematics.

The report is recommended highly to any elementary school teacher who believes that elementary school students learn mathematics in a way that is, in many respects, basically different from the way in which secondary students learn it. It is recommended to all high school teachers of mathematics.

- Daiyo Sawada

Editors' Note: Mr. Sawada, who earned the degree of Master of Education from the University of Alberta in 1966, is a sessional instructor in the Department of Elementary Education of the Faculty of Education at the above university. One of his interests is the development of mathematical concepts in young children.

HELP WANTED

In the January issue of the *Newsletter* we made a plea for news items to be supplied by the readers. So far we have not been inundated by submissions. Surely something of interest to teachers of mathematics is happening in your school or in your locality. It may be a teaching technique or type of material that you have found to be particularly effective; it may be a problem that has an interesting aspect or solution; it may be a point of view that you would like to share with others. Whatever it is, let's hear about it.