

which involve bodily movement. Here again there is much concrete illustrative material.

In Part IV there are but two chapters, one of which is entitled "Visual Exploration"; the other, "Experimentation with Sound."

Throughout the text the author takes a biological attitude toward play, treating the subject in a thoroughly scientific manner. The book is sound in theory and is a genuine contribution to the philosophy of play. More than that, it is an extremely practical discussion of a proposal which, if widely adopted, would do much to produce a superior type of play by providing a more stimulating environment. The book will be of particular interest to kindergarten and primary teachers and to classes in education where the topic of play is considered.

G. T. B.

The growth of reading ability.—The complexity of the reading process presents a constant challenge to the educator. A recent monograph¹ of the University of Chicago series gives clear and practical help in defining certain of the problems involved and in suggesting means for their solution.

An appropriation from the Commonwealth Fund made possible the examination of the eye-movements during reading of 186 subjects, these being selected from all of the elementary and high-school grades and including an adult college group. Comparative data were thus secured for plotting growth curves as to the average number of fixations per line, average duration of fixations, and average number of regressive movements per line. These curves are tested by results secured from the use of standard tests.

The author takes the broad view that while all fundamental reading habits must be developed in arriving at maturity in reading, no method is to be condemned because it does not secure such development at any given time. The psychologist is said to be interested in all methods which secure results, though the practical teacher must choose the method which secures most economically those habits which are fundamental for her grade.

The detailed study given of first-grade cases is unusually helpful. Sufficient data showing tangible results have been hard to secure by other means. Yet intelligent study of the beginner is essential if economical methods of teaching are to be evolved. In the monograph results are given illustrating two contrasting methods. The differences are said to be immaterial provided the teacher knows how to supplement the training later to make up for deficiencies.

Analysis of specific difficulties is given in a few cases with specific recommendations for overcoming these difficulties. A fruitful field lies here.

The reader is impressed with the scope of the study, the objective quality of the data presented, and the broad view used in interpreting results. Occa-

¹ GUY THOMAS BUSWELL, *Fundamental Reading Habits: A Study of Their Development*. Supplementary Educational Monographs, No. 21. Chicago: Department of Education, University of Chicago, 1922. Pp. xiv+150. \$1.50.

sionally one questions a conclusion. Is it really shown that the *character* of the reading process is different during the first four years? Has development in the later elementary years been shown? On the whole, however, the student of the reading field will find the study most helpful.

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A new type of pictured textbook.—Although the psychology of visual presentation has been thoroughly applied in the fields of advertising and journalism, writers of school textbooks have been slow to accept this method of presenting materials. However, in a recent textbook in civics¹ there appears a radical departure from the traditional practice of book construction, and there is exhibited a thoroughgoing application of the principles of visual education.

The purpose of the text is to present a vivid concept of the fundamental principles underlying the organization and the activities of our government. "The main emphasis throughout the book is placed on ideas vital to an understanding of the actual workings of our government rather than on a purely encyclopedic statement of detailed activities which change so rapidly from day to day" (p. 3). The text throughout is written in simple style, adapted to pupils in the upper grades or the junior high school.

The method of presentation is unique. The material of the text, which is organized into fourteen chapters, is printed in vertical columns which occupy half of each page. The remaining half of the page is devoted to pictures which serve to make more vivid the accompanying material. In most cases there are three pictures or diagrams on each half-page, the total number of illustrations being well over five hundred. Beneath each picture there is a brief descriptive caption in bold-face type, while in many instances a number of these captions form a connected description of a series of pictures. The material of the text is therefore presented in three ways: first, by the well-chosen collection of pictures; second, by the attractive captions beneath the pictures; and third, by the main body of text material.

This textbook is built on those principles which have proved so highly successful in the field of journalism. Certainly the book will catch the attention and stimulate the interest of the pupil far more readily than the unattractive pages of the ordinary book. The vivid reactions which are aroused, not only by the illustrations, but also by the frequent headlines and inserts, would seem to have a special value in such a field as civics.

While the reader's attention is first given to the radical departure in the form of the book, it is later held by the content, which is excellent from the standpoint of both clearness and validity. The field covered is somewhat

¹ JEREMIAH WHIPPLE JENKS and RUFUS DANIEL SMITH, *We and Our Government*. The American Viewpoint Series. New York: Boni & Liveright, Inc., 1922. Pp. 224. \$1.50.