These questions were derived from a preliminary test given to 1200 children in three public schools of New York City in grades 4-8 and from revised tests taken by 2000 more pupils.

Van Wegenen lists five desiderata for measuring historical abilities: First, that "the tests be symptomatic of important abilities really desired by the schools." The outcomes tested are important ones, though facts are valuable mainly for use in solving problems, in making judgments and in interpreting historical situations. It is to be hoped that this investigation will stimulate others to complete the standardization of the objectives of history teaching. Only in this way can we obtain a scientific statement of what the aims of historical instruction are. His second thesis is that "the tests be not too much disturbed by linguistic difficulties so that ability in history, not in reading and composition, may be chiefly measured." His results, in general, accord with this desideratum. Third, "that the measurement of a small group, such as a class of twenty-five or more, may be made with sufficient precision." A correlation of above .7 between each type of test is obtained. Also detailed tables of the degree of difficulty of the questions with a "key" for the scoring of the same makes possible accurate measurement of a class. However, if he would also transmute his scores into the familiar percentage scheme with the value of each question on that basis indicated on the teacher's scorecard, it would be much more helpful to the history teacher. His fourth point that "the tests be capable of extension to alternative forms so as to reduce harm done by coaching" is taken care of in these scales by including 70 Fact, 44 Thought and 40 Judgment questions. These together well exhaust the content of United States History. Fifth, the last criterion that "the administration and scoring of the tests be convenient" is illustrated by the fact that fifty minutes is sufficient to exhaust the abilities of all save a few and that the scoring can be done relatively accurately by the average history teacher by means of his "key." E. U. Rugg.

Teachers College, Columbia University.

5. *A report of use of tests.*⁵ The students of a summer course in experimental education under the direction of Baldwin were each given a specific piece of work in tests and measurements. These

⁵Baldwin, Bird T., and others. *Studies in Experimental Education*. The Johns Hopkins University Studies in Education, No. 3. Baltimore, 1920. Pp. 75.

experiments were conducted by the students in a small demonstration school of six grades containing 129 pupils "who represent, in most instances, examples of maladjustment in educational progress." The tests conducted by these university students were written up and form eleven articles in the monograph. These studies give the results of the following tests: Yerkes Scale, Terman Scale, Courtis Arithmetic, Woody Arithmetic, several handwriting scales, Kansas and Starch Reading, several spelling scales, Trabue Completion, Hillegas and Ballou Composition.

Naturally the results obtained on a small group of children under the circumstances described could not be expected to be of great importance. No particularly new line of attack is followed in any of the studies. Some of them stress the data obtained and others attempt some discussion or criticism of the tests themselves. Some of the studies hardly go further than a clear presentation of the data. It might rightly be questioned whether students' themes of this type warrant publication in a university monograph or, indeed, whether they warrant publication at all. To the reviewer what justification there is would seem to lie mainly in the stimulus to advanced study and independent research which such an undertaking might give the students concerned. There can be no doubt that a group of students working towards the publication of their studies would be stimulated thereby. The whole monograph, therefore, forms a splendid example of the project method applied to the study of mental and educational tests. It shows moreover how well adapted to the project method is the study of this phase of educational psychology. In this field individual and group projects can be used very effectively.

The first chapter of the monograph is a summary of the students' work by Baldwin himself, in which he attempts to correlate all the separate studies. The presentation of a great many correlations of such a heterogeneous and small group of pupils does not help us very much. The developmental graph of the circular type combining all the various ratings of a particular child is interesting.

The monograph should be read by all teachers of university classes in tests and measurements in order to get some idea of how the project method may be applied to their classes.

R. PINTNER.

Ohio State University.