

McGRAW-HILL SERIES IN EDUCATION
HAROLD BENJAMIN, CONSULTING EDITOR

Educational Measurements
in the
Elementary School

McGraw-Hill
Series in Education

HAROLD BENJAMIN

CONSULTING EDITOR

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Educational Measurements

in the

Elementary School

BY

M. E. BROOM, PH.D.
Assistant Superintendent of Schools
El Paso, Texas

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PREFACE

The developments of the past several decades have shown that some knowledge of educational measurements is an essential part of the equipment of the classroom teacher in the elementary school. Good testing has come to be closely correlated with good teaching. This volume attempts to give the historical facts and the philosophy necessary for an understanding of how educational measurements have developed, as well as to present information dealing with the construction and uses of achievement and mental tests. A consideration of statistics is included, since statistics is an essential tool in dealing with problems involving educational and mental tests, but this material has been kept at a minimum.

This work is intended as a guide both for classroom teachers and for students in teacher-training institutions. Technical discussions, such as are desired by technicians, have been reduced to a minimum; the criterion in choosing materials for inclusion in the discussions of different topics has been What does a teacher need to know? The discussions of measuring instruments in the different subject fields gives very few technical data; the author is convinced that those who wish such information will be served best by the information contained in articles in professional periodicals and in manuals accompanying standardized tests. Furthermore, an extensive study of standardized tests is necessary for good test construction. The treatment of mental tests is more technical than is that of standardized achievement tests, since teachers need specific information concerning these instruments, which they will use but which few will construct. The presentation of the materials has been guided in part by the nature of students' difficulties with this subject during the fourteen years the author has taught educational and mental measurements courses in teacher-training institutions, just as the content was selected to satisfy teachers' needs and interests, as evidenced during the past four years of the author's experience in a large public-school system.

The author's indebtedness to writers in the field is evident

throughout the volume. He wishes to acknowledge the courtesy of the many writers and publishers who gave permission to use certain of their published materials. Without this privilege, the work could not have been completed. Specific acknowledgments to authors and publishers appear at appropriate points throughout the volume. The author is indebted also to Beatrice H. Broom, who read the entire manuscript and gave numerous valuable suggestions in addition to checking many of the statistical calculations.

M. E. BROOM.

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September, 1939.

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EDITOR'S INTRODUCTION

The modern progressive movement in education is sometimes attacked on the ground that it is opposed to the quantitative determination of a child's needs, capacities, and achievements. This attack is largely a process of belaboring a dead horse. Although it is true that certain reformers in the early days of the activity movement were suspicious—in many cases very properly suspicious—of some of the testing programs then in vogue, it is now clear that most modern educators are eager to employ every available instrument that will give precise information concerning the abilities of the learner and the progress of his learning. That is exactly the characteristic which makes them truly modern in their outlook on education.

The whole system of education as it is conceived in the most forward-looking schools requires the use of careful and exact measurement. Its methods of instruction are based on a recognition and utilization of individual differences which can be known only through measurement. Its guidance program is merely a slough of pious hope when it is not a morass of chicanery unless it rests squarely upon a foundation of measurement. Even the attainment of its highest aim—the development of those character and personality traits which are least susceptible to quantitative treatment at the present time—is aided rather than hindered by the use of properly constructed, applied, and interpreted measures of learning. The teacher today needs a more accurate, comprehensive, and critical knowledge of measurements than ever before in the history of his craft.

The present volume is designed to supply that knowledge. It is a compendium of the information needed by an elementary teacher in carrying out the measurement phase of his work. It describes clearly and succinctly the nature and uses of tests and examinations used in the elementary school. It gives a wealth of exercises for acquiring skill in the construction and application of teacher-made tests and in the use and interpretation of standard tests. It offers the reader an opportunity

to evaluate his own growing knowledge by a series of examinations on the book itself.

The author of this book is eminently qualified for the task of presenting his subject. For many years he has taught the principles and techniques of educational and mental measurement to prospective teachers in college and university. He has supplemented this experience with extended work in the day-by-day guidance of teachers in service. His scholarly command of the subject and his understanding of the everyday problems of workers in the field have enabled him to produce a volume of highest usefulness to the profession.

HAROLD BENJAMIN.

UNIVERSITY OF MARYLAND,
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