

FITTING THE SCHOOL TO THE CHILD

An Experiment in Public Education

BY

ELISABETH A. IRWIN

Psychologist, Public Education Association of
New York City

AND

LOUIS A. MARKS

Member Board of Examiners, Board of Education, New York City
Formerly Principal Public School 64

New York

THE MACMILLAN COMPANY

1926

All rights reserved

PRINTED IN THE UNITED STATES OF AMERICA

COPYRIGHT, 1924,

By THE MACMILLAN COMPANY.

Set up and electrotyped. Published April, 1924. Reprinted
May, 1926.

Norwood Press

J. S. Cushing Co. — Berwick & Smith Co.
Norwood, Mass., U.S.A.

PREFACE

THE experiment described in this book was, briefly stated, an attempt to make the school fit the child. It was carried on in one of the largest elementary schools in New York City, attended daily by 3,000 pupils. It was not merely a problem of finding space and sittings for this large number of children. We believed it possible to create a school environment in which the child himself could feel that he belonged.

The experiment covered the period from September, 1916, to January, 1922. Its conclusion at this date was due to the introduction of the junior high school into the New York City system, which has led to a radical alteration in the character of many elementary schools. Among those affected by the change was Public School 64, the home of the experiment described in this book. Its excellent shop equipment made it a desirable building for the type of work projected by the junior high school organization, and it was therefore decided to take over the premises for that purpose. The lower grades were shifted to schools near-by, so that eventually only the upper grades remained. With this change of character, Public School 64 became no longer available for an experiment which emphasized the earliest possible study of the school child; its special problems had changed. For this reason, the experiment was transferred to a school for young children at 535 East 16th Street.

In the meantime, the experiment had progressed sufficiently to justify a recapitulation and a detailed record. It seemed

that the time had come to relate the story of the pioneer work which had been done, to give an account of the successes and failures encountered in specific directions. To give such a survey is the purpose of this book.

The basis of the experiment was a program of coöperation between Public School 64, Manhattan, and the Public Education Association of New York City. The writers wish to acknowledge their indebtedness to Mr. Howard Nudd, Director of the Public Education Association, whose loyal support and educational vision have been indispensable elements in their coöperative plan; to Miss Jane Culbert, Executive of the Visiting Teachers' Staff, who has been affiliated with the experiment as a close adviser and whose valuable counsel has assisted the staff in overcoming many obstacles and discouragements incidental to the undertaking; and to Emily Leonard Brown, who, during three years has, as a visiting teacher, brought to the experiment a unique understanding of personal problems growing out of the family situations or school maladjustments of the children under consideration. Mrs. Brown has specialized on mental adjustment cases and has worked in close connection with Dr. George M. Parker, the psychiatrist; Miss Regina C. Burke, formerly Assistant Principal of Public School 64 and now Principal of Public School 39, the Bronx, has contributed to our combined endeavor her genius for organization and her open-minded and experimental attitude. Without the help of all the teachers in the school and of the school officials, the experiment would never have assumed the practical form outlined in the following study.

To conduct a grading experiment in so large a school necessarily required an extensive amount of psychological testing and research work. The regular staff had the constant assistance of advanced students from Teachers College and Co-

lumbia University, whose services in the aggregate amounted to the full-time work of several persons.

Dr. George M. Parker has given his services two mornings every week to psychiatric work, in the belief that through the study of the emotional trends of children, we should be able in time to make suggestions regarding the universal needs of children which the present school courses are not attempting to meet.

Dr. J. L. Stenquist, of the Department of Reference and Research of the Board of Education, has made an extensive though brief study of mental and pedagogical tests in this school, in order to obtain data for recommending certain tests throughout the system for similar experiments. This study was concerned with group tests intended for the classification of children in large numbers. We shall have occasion to refer to this study in one of the later chapters.

Miss Elizabeth Farrell, Inspector of Ungraded Classes, has coöperated in a generous and sympathetic spirit with the experiment by the creation of special observation classes for young children, and classes for neurotic children.

Toward the latter period of the experiment, the resources of the school were increased by the addition of a full-time vocational counselor, Miss Cornelia Beall. The Vocational Guidance Bureau initiated the work which was later strengthened and extended by the amalgamation of the Vocational Guidance Bureau and the State Employment Service for Juniors. This organization has maintained vocational counselors in nine public schools, of which Public School 64 is one. Its recent specialization as a junior high school had made the contribution of the vocational counselor an indispensable part of the school activities.

The most important experiment in the school in actual modification of curriculum was directed by Mrs. Marietta

Johnson of the School of Organic Education, Fairhope, Alabama. Mrs. Johnson visited our school weekly, raised the necessary budget for her experiment, provided her own equipment and supplies, and furnished the salary of a specially trained teacher for a year. Several of the regular teachers have undertaken experiments on their own initiative under her direction. A more specialized study of curriculum was undertaken by the assistant psychologist, Miss Zena C. O'Connor, toward the end of the experiment.

An effort toward the enrichment of the curriculum was made possible by the coöperation of a number of social agencies. The Neighborhood Art School of Greenwich House, although in a different part of the city, loaned two teachers for a year and a half to work with the classes of bright children. Mrs. Harriet Ayres Seymour's Music School contributed for one year the services of Miss Marjorie Kneeland for these classes. The work done in art and music was much more extensive than anything of the kind undertaken by the regular school department, and offered a happy opportunity for the creative spirit of this group of gifted children. Of equal significance was the course in natural science, conducted by Miss Laura Garrett. It was her inspiration that led to the establishment of the animal room as the best medium for this type of science teaching. A further extension of our teaching resources was made possible through the assistance of members of the Junior League, who aided the experiment as tutors and teachers of French.

Valuable assistance has been given by the Boys' Club, under the leadership of Mr. Louis C. Downer. This club occupies a seven-story building just across the open square from Public School 64. Without access to the splendid gymnasium and swimming pool of this club, and without recourse to its facilities for club work, summer outings, and personal attention to

special cases, we should have been greatly handicapped in our experiment. It would have been impossible without this coöperation to carry out at least half of the recommendations of the psychiatrist, since these were largely concerned with proper after-school activities. We had the use of the Boys' Club for a number of classes during school hours as well, and thus we were able to achieve, partially at least, an extension of facilities such as every city public school should in some way possess. Similar support was given by Miss C. I. McCall of Christadora House, a settlement adjacent to the school. The gymnasium of the settlement house has enabled the school to make up partly for its own lack of equipment. In addition, a Boy Scout group has stood ready to receive members recommended by the school for this type of activity. Christadora House has loaned its music room for special classes in music, and has allowed the use of its club rooms daily for tutoring, testing, and class work. It has also done extensive summer work for individual children, and during one season took care of all the children from the nutrition classes for an entire summer.

The Children's Aid Society, which maintains a school building just around the corner from Public School 64, generously donated classroom space for special classes. The experiment with a group of normal children was carried on here for one year. The class for cardiopathic children was initiated and grew to its full size under the hospitable roof of this Eighth Street building. The sympathetic coöperation of Miss Emma Sinn as Principal of the Children's Aid School contributed very largely to the homelike atmosphere which helped these classes to thrive from the beginning.

The Tompkins Square Branch of the New York Public Library has given special attention to the needs of the classes for bright children. It has been possible to plan class work on

the basis of a permanent supply of reference works and other books near at hand.

The coöperation of hospitals and dispensaries should be especially acknowledged. Yet health work within the school has remained the most limited aspect of the experiment. The regular routine of the Board of Health has been, unfortunately, of such a character as to be of little practical assistance in really studying the health of the children. So far as any constructive aid could be secured, we were obliged to limit its benefits to selected groups. The Eye Clinic of the Board of Health is located in the school and has done a great deal in the way of examining the children of the entering classes and in following up those who required glasses. Dr. Robert Kahn, the physician in charge, has given unstinted service to this work.

Dr. L. A. Leichter, a dentist practicing in the neighborhood, has given several mornings a week to the children of the school. His efforts have been centered upon the nutrition group and the Terman classes.

The Department of Physical Education of the Board of Education has also coöperated on special problems. Dr. Harry I. Goldberger of this department has given his services as a pediatricist in the individual examination of special groups of children, including the nutrition classes.

The nutrition experiment was carried out in the school for two years and a half by the Bureau of Educational Experiments. While essentially intended as a piece of research work, it also had practical benefits. A description of this experiment has been published by the Bureau of Educational Experiments in a volume entitled *Health Education and the Nutrition Class*.

Through the assistance of Dr. Robert H. Halsey, Secretary of the Association for Prevention and Relief of Heart Disease, it was possible to establish the special classes for cardiopathic

children, a valuable and unique contribution to the health education of the public school system. The Children's Aid Society provided a room for these classes, the Board of Education supplied the teacher, a trained nurse was secured from the Henry Street Settlement, and a salary for her services was contributed by the Public Education Association.

To the generous coöperation of the Commonwealth Fund we owe the services of Katharine Anthony, who has given editorial assistance in the production of this record of the experiment.

The experiment from the beginning has been directed and supported in all of its aims and efforts by the Public Education Association of New York City.

Especially do we wish to acknowledge a deep and abiding indebtedness for scientific guidance in the work of classification to Professor Lewis M. Terman of Leland Stanford University. Without the researches of Professor Terman and his stimulating suggestions for educational applications, our experiment would never have been attempted. We are especially happy in paying tribute to this conscientious scholar, who has consistently followed a high standard of professional candor in the acknowledgment of his own intellectual debts. By reference to Professor Terman's works, where full credit is given to the creative investigations of Alfred Binet, we can most adequately acknowledge our own obligations to the great French pioneer in dynamic psychology.

E. A. I.

L. A. M.

MARCH, 1924.

FOREWORD

THE following story of an experiment in grading children in one of New York City's largest public schools — an experiment conducted over a period of years — has many interesting aspects.

The purpose in view and the methods utilized are fully presented in the text itself and require no extended comment here. The aim was two-fold. It was sought to ascertain, as accurately as possible with existing measurements, the mental and physical capacities of the children as they entered school. On the basis of this information and of supplementary data regarding the forces which were affecting the welfare of the children, in and out of school, an effort was made to adapt educational experiences to individual needs. The measures adopted and the success achieved naturally were conditioned by the public school situation and the degree of coöperation that could be secured from the home and from community resources.

As the project was begun at a time when efforts in this direction were comparatively new, many interesting and baffling trails had to be blazed. The fact that the experiment was conducted in a large school in the largest public school system in the country, with all the problems such a situation inevitably presents, made the work unusually exacting but proportionately significant to the broad field of public education. Conditions had to be faced and met as they arose from day to day, and always the machinery of a large school organization had to be given due weight and consideration.

The experiment is quite as significant, however, as a demonstration of how an unofficial organization of citizens can co-operate with the educational authorities in furthering the welfare of the public schools. The school staff and the staff provided by the Public Education Association, with the additional coöperation they were able to enlist, have shown clearly how a great public school can be administered to function more effectively for the children.

The task undertaken in this experiment is by no means completed. In fact this account of the work in Public School 64, Manhattan, may be regarded as but an opening chapter in the movement toward dealing with the pupil as a child. Its appearance at this time is actuated by a two-fold purpose:

First, it is believed that a recital of the trials and achievements in this particular experiment will be stimulating and helpful to those who are conducting or contemplating work with a similar purpose elsewhere.

Second, the reorganization of Public School 64 as a junior high school made it advisable to transfer the experiment to another school where the fundamental purpose of the work could properly be carried out. As has been indicated, this purpose was to ascertain the children's capacities and their problems at the very beginning of their school life, rather than after they had drifted along for several years. Because of the obvious necessity for this transfer to another elementary school, it seemed that a logical point had been reached for taking account of stock and for presenting to those who might be interested the history of the preceding years in evolving the procedure. The experiment is now being continued as an annex to Public School 61, Manhattan, located at 535 East Sixteenth Street and known as the "Little Red School House."

The Public Education Association takes this occasion to thank the school authorities for the opportunity to coöperate

in making possible this illuminating experiment, and to acknowledge the assistance received from many sources. Most of this assistance is indicated in the Preface and in the course of the following narrative. But, at this point, we wish to acknowledge particularly the generous financial assistance of the Commonwealth Fund. This help has made possible not only the preparation of the present volume, but also the enlarged staff which the Association is now enabled to provide for continuing the experiment in untouched fields revealed by the earlier work at Public School 64. •

HOWARD W. NUDD, Director,
Public Education Association of
the City of New York.

MARCH, 1924.

EDITOR'S INTRODUCTION


DURING the past two decades, an enormous amount of experimental work has been undertaken by American psychologists and educators for the purpose of developing serviceable methods for determining the intellectual capabilities of individuals, particularly of children of school age, and also for the purpose of devising ways and means of measuring achievement in school work. The data derived from all this experimentation has been presented in written form in books and magazines and in oral form at psychological, educational, and parent-teacher association meetings. Practically all that has been written and spoken on the subject of measurement of intelligence and achievement has been concerned with the presentation of evidence relating to the validity of measuring scales and educational tests, and with arguments stressing the desirability and the necessity of employing measuring scales in diagnosing the mental characteristics of pupils with a view to grading them accurately in school work. Those who have been conducting investigations have been conscious of a widespread belief that pupils of the same age in school do not differ markedly in capacity or in needs, either in respect to intellectual training or to management. Investigators have, therefore, thought it necessary to impress upon teachers and also upon parents and others who are responsible for the care and culture of the young that in a group of children of the same age there are likely to be important differences in intellectual power and emotional traits, which differences

require that the individuals concerned be treated somewhat differently while they are undergoing educational training.

Recent educational books and periodicals and even newspapers and popular magazines are burdened with complaints relating to the apathy of teachers and parents in respect to the problem of differentiating children and dealing with them according to their capacities and their temperamental and energetic characteristics. There has also been a vast amount of literature published during the last few years which has had for its aim the convincing of the public that we are now in possession of means of determining with a considerable degree of accuracy what a pupil is capable of accomplishing intellectually and whether he is achieving in his school work up to the full measure of his capacity.

In all this written and oral discussion relating to the adoption of psychological methods in organizing and conducting schools and in dealing with individual pupils in accordance with their capacities and needs, there is very little that shows concretely and convincingly how these methods can be utilized in typical public schools having all sorts and conditions of pupils. There are but few and incomplete reports of efforts that have been made to conduct schools in accordance with the requirements of psychological diagnosis of the pupil population. As these lines are being written there are rumors that certain school systems are to be administered henceforth on the basis of intelligence and educational tests. Newspapers are saying that several cities have decided upon a reorganization of their schools with a view to utilizing the results of that development of useful methods of diagnosing mental traits and powers which has taken place during the past two decades; but, thus far, there has been no impressive account of an actual experiment on a large scale showing how a school can be conducted on the basis of intelligence and educational tests and giving the

results of a thoroughgoing application of accurate measurements in determining the treatment best suited to individual pupils.

The present volume shows how a large public school in New York City with an extremely complex pupil clientele, has been reorganized and administered in view of the results of recent investigations showing wide variation in the physical and psychological constitution of children of the same chronological age. Miss Irwin and Mr. Marks undertook this difficult task several years ago. They first made a survey of their pupil population, and the results of this survey are presented in Chapter II of the present volume. The account of their experiences in the utilization of psychological tests for diagnostic purposes and of how the results affected the organization of the school and the classification and treatment of the pupils is illuminating. It is also fascinating as told by the investigators. 

Perhaps the most interesting and important phase of the story relates to the remedial treatment of children who had not been favored by nature or who were not fortunate in the environmental circumstances of their lives. Probably no teacher can read this story without realizing the importance of the questions to which the authors of this volume undertook to find an answer and without a feeling of gratitude for the contribution they have made toward the solution of problems which confront everyone who is responsible for the conduct of a school or a classroom. It is not too much to say that the life and work of Public School 64 were transformed as a consequence of the adoption of the psychological methods employed by Miss Irwin and Mr. Marks — methods which could be easily used in almost any school provided they were directed by an equal intelligence. The authors have made it more evident than it has perhaps ever been made heretofore that

when pupils are dealt with according to their capacities and needs rather than according to formulæ established and applied without any regard to native differences in mental and physical constitution, the spirit and temper of the school, as well as its pedagogical achievement, will be greatly improved because teachers will be working *with* and not *against* nature.

The authors of this volume are endowed beyond most educational writers with a gift of clear and graceful expression. They have aimed to present the results of an elaborate and complex educational experiment in terms that the non-technical reader can understand and in a style that he can enjoy. The editor believes that the authors have had unusual success in the accomplishment of their task. The illustrative figures and tables in this volume are fitted into the story in such a way that even persons who shudder at the sight of a table or a graph can assimilate what is presented without serious inconvenience.

It may be predicted that anyone, whether teacher or layman, who will read this volume will conclude that it is possible to organize and conduct a school today with the aid of accurate measures of intelligence and achievement with far greater success than has been possible with less modern methods — success, in the sense of fitting the school to the pupils rather than of attempting to make the pupils adapt themselves to a school program determined *ab extra* with but slight reference to the varied traits and capabilities of those whom the school is designed to educate.

M. V. O'SHEA

THE UNIVERSITY OF WISCONSIN
March, 1924.

TABLE OF CONTENTS

	PAGE
PREFACE	v
FOREWORD	xix
EDITOR'S INTRODUCTION	xxiii
 CHAPTER	
I. INTRODUCTION	1
II. THE HOME OF THE EXPERIMENT	8
III. DEVELOPMENT OF CLASSIFICATION	28
IV. THE TEACHER AND THE PSYCHOLOGIST	59
V. ORGANIZATION OF THE SCHOOL	85
VI. THE COURSE OF STUDY	112
VII. THE UNGRADED CLASSES	132
VIII. THE DULL NORMAL BOY	161
IX. THE NEUROTIC CHILD	180
X. THE GIFTED CHILD	219
XI. VOCATIONAL COUNSELING	250
XII. HEALTH EDUCATION	280
XIII. CONCLUSION	307
 APPENDIX A. COMPARISON OF SCHOOL AND ARMY RESULTS	 325
APPENDIX B. A PROGRAM OF PHYSICAL EXERCISES USED IN CARDIAC CLASSES	 327
BIBLIOGRAPHY	331
INDEX	337