

The Place of Industries in Elementary Education

By Katharine Elizabeth Dopp

THIRD EDITION
REVISED AND ENLARGED



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AUTHOR'S NOTE.

THE difficulties that beset the way of those interested in elementary education are many. They have called forth much discussion during the past decade, and already a great advance has been made. If this book contributes to the general movement it will doubtless be due to the fact that it suggests ways of bringing into vital relations forces and materials which, hitherto, have remained almost untouched.

The study here made is based upon several years' practical experience, during which many tentative efforts were made along lines marked out in this book, as well as upon research work in the Departments of Education and Sociology in the University of Chicago. To the men and women of these departments, from whom I have received much in the way of guidance and inspiration, I am greatly indebted. They all, I am sure, will recognize in the discussion of the stages of mental development the influence of Professor Dewey; and in the interpretation of primitive activities, that of Professor W. I. Thomas.

THE UNIVERSITY OF CHICAGO,
March, 1902.

AUTHOR'S NOTE TO REVISED EDITION.

Soon after the publication of the first edition of this book, letters were received suggesting that it be expanded so as to serve as a teachers' manual. Although I had already undertaken a series which is a concrete expression of the theory presented, the length of time required to complete the work is so great that it has seemed fitting to take the suggestion and to present in the new edition of this book a chapter which it is hoped will prove helpful in bridging the gap between what we as teachers are actually doing and what we believe we should do. Comparatively few schools are yet equipped for practical activities, and few teachers are familiar with methods of using them as laboratory courses to the content studies. It has seemed best, therefore, to devote the new chapter (1) to ways of procuring a material equipment, and (2) to ways of using it so as to enhance the value of colonial history—a subject familiar to every teacher and taught in every school.

With the exception of the frontispiece, which is from the School of Education of the University of Chicago, the sources of the illustrations are indicated. These illustrations show more clearly than words the hold which practical activities have already taken upon the schools. No more powerful appeal can be made for such work than that which may be read from the faces of the children.

JANUARY, 1905.

AUTHOR'S NOTE TO THE THIRD EDITION

The events of the past few years have demonstrated that no people can live unto itself alone. It must share in the common life of the world or go down under the weight of its own folly. Everyone knows that geographical barriers have been largely overcome. And everyone should know that intellectual barriers can be overcome through education. Human selfishness, greed, prejudice, antagonism, ignorance, and their train must be overcome if we are to solve the problems which confront civilization today. They must be overcome if man is to have dominion over the material world. The bulwarks of our educational structure must be strengthened by making use of the best that has come to us from all ages and climes.

We cannot go back to the past if we would. We cannot even go back to pre-war conditions. Neither can we isolate ourselves from the world of the present or the past. For each people, each age, contributes something to the life of the whole, and if we would carry on the work of civilization we must understand the steps of past progress.

The author desires to take this opportunity to thank the educational public for the reception

it has given to earlier editions of this book, a reception especially cordial when it is taken into consideration that the book was originally written as a doctor's thesis. The varied uses to which the book has been put heretofore have prompted the desire to make it still more available. An outline of each chapter has therefore been added at the end of the volume, together with questions growing out of the topics treated in the text. Five additional illustrations have been included in this edition, reproduced from the author's "Industrial and Social History Series" through the courtesy of Rand, McNally & Company.

July, 1920

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CHAPTER I.

INTRODUCTION.

ONE of the most striking characteristics of society today is the marvelous development that is everywhere manifest along industrial lines. In nearly every department of industry the simple processes which formerly prevailed have become differentiated into a great variety of activities, and all have been organized into a definite system. Methods of exploiting the earth in the search for raw materials, processes of manufacture, and modes of distribution and exchange have become wonderfully complex. The influence of this change is far-reaching. It permeates every department of life. It operates in the church as well as in the state, in the home as well as in the school. No institution of society can escape its influence.

Society today differs from earlier societies, not in its organic character, by virtue of which the life of one institution affects that of every other; it differs, rather, in the complexity of its organization, which frequently obscures the more fundamental relations which, in primitive societies, are laid bare to the view.

From the remotest to the most recent times,

in the simplest as well as in the most highly organized societies, industry has been a dominant force in the upbuilding and maintaining of social structures. In the more simple social groups it is possible to perceive very clearly the fundamental place of industry in society and the vitality of its relation to all other activities in life. In such societies it appears as the matrix that holds within itself the other interests of life, which it nourishes until they become strong enough to support themselves. The vitality of this relation is illustrated in more developed societies in the decadence of those arts whose connection with the parent stock has been severed, as well as in the remarkable development of the same arts during the times when they have stood in such relations to the industrial life of the people as to be constantly receiving and giving strong currents of inspiration.

Human beings of all times have doubtless been impelled by other desires than those which underlie industrial activities; they have always been dimly conscious of unfulfilled desires. The fact that industry has ever exercised such a prominent place in conditioning other activities is not because others, at times, have not been valued more highly, but because industry is the substructure of society, which conditions its very existence. It was necessary to the maintenance

of life before individuals had united to form social groups. It was an essential factor in the formation and maintenance of such groups, and has been a permanent factor throughout the ages in the development of the institutions of community life.

It seems evident, then, that that which is the condition of life itself and the fountain source of the arts and institutions of society should have a place in the education of the young, upon whom will soon fall the responsibility of maintaining and advancing the activities by which society is sustained and strengthened. This need has always been felt, and provision of some kind has always been made for putting young people in possession of such experience as is calculated to fit them for the serious work of life. The character of this training has varied with the people and the age, but in some form or other it has persisted throughout all time.

Among Aryan peoples, from the earliest time to the latter part of the Middle Ages, this training was generally attended to by the *family*, whether it was the original clan, the patriarchal group, the tribal circle, or the family artificially extended by personal servitude. During the period of *town economy*, which extended from the rise of the towns and the development of handicrafts in the latter part of the Middle Ages until the industrial

revolution of the eighteenth century, the training of the family was supplemented and in some cases superseded by the system of apprenticeship. With the rise of *national economy*, technical institutions and engineering and commercial courses were established in order to meet the demand for trained workers to manage the various departments of highly complex industrial undertakings. No provision, however, was made for the training of the great mass of the workers for their life-work. This was partly due, no doubt, to the fact that the new inventions made it possible to utilize unskilled labor to a degree not known before that time.

The rapid development of means for cheap manufacture and transportation has resulted, as is well known, in the withdrawal of the industries formerly carried on in the home and the transplanting of the same into factories where the work is carried on with closed doors. The child of today is thus deprived, except in a few cases, of the opportunity to observe or to participate in the industrial processes that form the substratum of all of our social achievements. If the consequences of this situation were felt only in the output of our industrial institutions, the consideration of this subject might well be left in the hands of the captains of industry and the economists. If, however, the consequences are such as to affect

the *quality of life* itself, the subject is surely one that cannot safely be neglected by those interested in the cause of education.

It is because it is believed that the industrial training of the young holds in solution the essential ideas that underlie the various activities of society, and that this substratum of experience in industrial processes is as necessary a condition for the normal development of the individual as racial industry has been for the maintenance and advance of society itself, that the question is beginning to command the attention of thoughtful people.

Under the conditions of modern life we can no longer expect the home to furnish the child with experience in industrial processes ; we must look to some other institution. The institution that we look to most naturally is the school ; but the common-school curriculum is already overcrowded, and, if new subjects are to be added by the process of aggregation, all interested in the work must object to any such change. Happily, however, in respect to the subject under consideration, industrial training, it is not so much a question of imposing greater burdens from without as it is of finding the means of reconciliation between the child and the subjects already there. The mere fact that every one recognizes the child as being burdened with his school work is signifi-