# THE PROJECT METHOD IN EDUCATION

MENDEL E. BRANOM



BOSTON

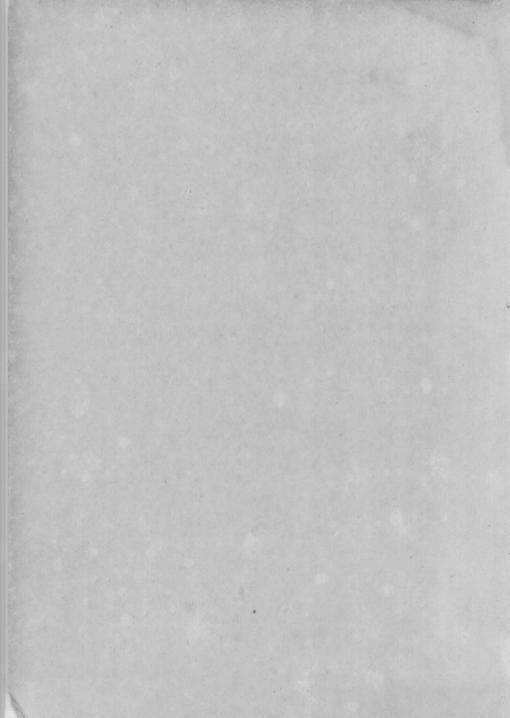
RICHARD G. BADGER

THE GORHAM PRESS

### $\mathbf{TO}$

## E. GEORGE PAYNE

PRINCIPAL OF HARRIS TEACHERS COLLEGE
WHOSE ENCOURAGEMENT HAS MADE
THE BOOK POSSIBLE



#### PREFACE

Modern education attempts to direct the child's development in such a way that the child will be a worthy participant of the institutional life of society; at the same time, an attempt is made to develop the particular abilities of each child, since institutional progress is dependent upon individual initiative. Rapid evolutionary changes in society have emphasized the need of reevaluating and of reorganizing subject matter.

During the World War the children of the schools were called upon to assist in numerous ways. An unusual opportunity was presented of motivating the school work through out-of-school activities. The effects were no less marked upon the teachers than upon the pupils. They were inspired by the field of usefulness that was opened to them. Teachers, everywhere, now that the war is ended, are not satisfied to go back to the bookish, theoretical education of former days, but there is considerable uncertainty as to how the work can be motivated through the out-of-school activities of ordinary times. Other institutions, during the war, needed the cooperation of the schools; the schools now keenly need the assistance of other institutions. The problem can be solved if teachers will make use of the various activities and materials of society. The chasm that has encircled the school, separating it from out-of-school activities, forever should be blotted out. The teacher needs to be a practical man or woman, who can make use of the present in educating the child. The requirements are much more exacting, but the recognition is correspondingly greater.

In an effort to relate the world's work to the child's interests and abilities, teachers of the manual arts have organized their work about situations, the manual efforts involved looking toward the completion of a particular unit of activity, which, to the child, has some value that makes the work meaningful. A project in agriculture may involve the care of a garden; a project in manual training may involve the construction of a chair. It is natural that the term, project, should be applied to this unit of activity that results in concrete, objective achievement. Because of the rather aimless, colorless, theoretical, impractical way that such subjects as history and geography have been handled, it has not been clear that projects likewise were involved. The manual projects were concerned with the refashioning of materials of the present. The "bookish" subjects may be concerned with the activities of any time and of any place, and may be any number of steps removed from real, virile twentieth century living. The real nature of mental activities, apart from manual activities, therefore, is obscured. For concrete materials, man may substitute imagery, and without engaging in manual activity, may "think through" a complete unit of purposeful activity, the result of which is fundamental in influencing behavior. Such a unit is as characteristically a project as the manual unit.

All educative effort, worthy of the name, affects behavior. An intellectualized, purposeful unit of activity is a project. All intellectualized work of the school definitely must be related to some project. The more effectively the material is selected and organized, the more economically will the development of the individual proceed. An efficient use of the project method requires that the materials shall be or-

ganized in such a way that, irrespective of whether manual activity is involved, the pupil will engage in a whole-hearted, purposeful unit of activity. All intellectual effort is worth while and is possible only because it functions in a project. The problem of the teacher is to bring about an intellectual development of the individual, along desirable lines, rapidly and efficiently. This can be done through the proper selection of material, and through its motivation in such a way that the child whole-heartedly attempts to overcome his difficulty, deriving much satisfaction not only because of the purpose and its realization, but also in the steps necessary to realize the purpose. A conscious recognition of projects' as necessary units of human growth, in relation to the aims of education, should bring about a selection and reorganization of materials in such a way that maximum social and individual realization is effected.

From the standpoint of the teacher, who is interested in the child's world, the interpretation of a difficulty, and the enlarged child's world as a result of the new experience, the unit of activity is a project, and the development goes on through the project method. From the standpoint of the pupil, the primary interest is in the difficulty or problem, and its interpretation, and the development goes on through the problem method. Whether the method of human development, therefore, shall be called the project or the problem method depends upon the viewpoint.

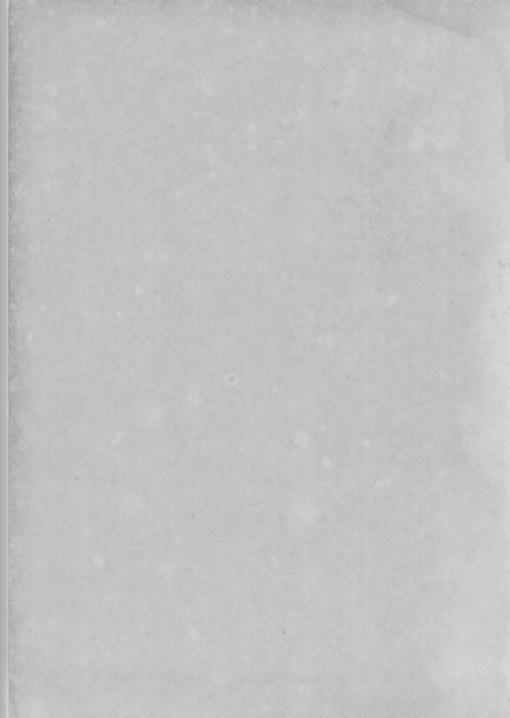
This book has been written in response to numerous inquiries that have come to the author, since the publication of several magazine articles on the project method, last year. It has been written, in addition to other heavy responsibilities, with the hope that it may "do its bit" in helping the teachers to meet the additional responsibilities and opportunities that have come. The author wishes to thank his colleagues of the Harris Teachers College, for their helpful encouragement in making this book possible.

Harris Teachers College, MENDEL E. BRANOM.

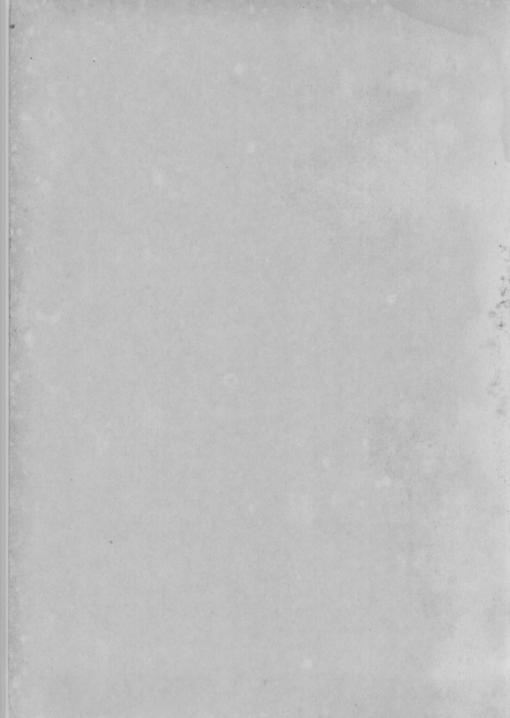
St. Louis, Mo. April, 1919.

## CONTENTS

CHAPTER	Preface			PAGE 3
I.	THE NATURE OF THE PROJECT METHOD			11
II.	THE EVOLUTION OF THE PROJECT AS AN EDUCATIONAL CO	NCE	PT	29
III.	THE RELATION OF THE PROJECT METHOD TO INSTINCTS			50
IV.	THE SOCIAL BASIS FOR THE PROJECT METHOD			63
v.	THE SIGNIFICANCE OF MOTIVATION			79
VI.	Teaching by Projects			106
VII.	LEARNING BY PROJECTS			123
VIII.	THE PROJECT-QUESTION			133
IX.	The Project-Exercise			141
X.	THE PROJECT-PROBLEM			145
XI.	Manual or Physical Projects			171
XII.	MENTAL PROJECTS NOT INVOLVING MANUAL ACTIVITY.			192
XIII.	THE PROJECT METHOD IN HISTORY			200
XIV.	THE PROJECT METHOD IN GEOGRAPHY			220
XV.	THE REORGANIZATION OF THE COURSE OF STUDY			240
XVI.	THE PREPARATION OF THE TEACHER			255
	References			267
	INDEX			279



## THE PROJECT METHOD IN EDUCATION



## THE PROJECT METHOD IN EDUCATION

#### CHAPTER I

THE NATURE OF THE PROJECT METHOD

The word "project" should represent a definite idea. The term project has not been coined to meet a special need in the pedigogical field for a new word to represent a nameless concept. For many years the word has been used by the English speaking public, although with its customary freedom the public has used the word in a variety of ways. According to Webster's New International Dictionary, the meaning of project as a noun is "that which is projected or designed; something intended or devised; a scheme; design; plan." The dominant idea involved is a consciously planned activity. The use of the word has been limited, by some people, to a proposed activity of considerable complexity and difficulty, while other people have used the term to include every type of intellectualized activity whether simple or complex, difficult or easy. The popular use of the word is indicated by the statements made in recent newspapers and magazines concerning "the project to extend a lane of ships from the United States to Europe," "the project to revive traffic on the Mississippi River," "the project to train disabled soldiers and sailors for suitable vocations," and "the project to establish a league of nations." A less general use of the word is indicated by statements concerning "the project of changing the time of the band concert," "the project requiring people to keep off the grass during dry weather," and "the project requiring the water to be cooled at all restaurants." Those who use the word in a general way to represent practically any type of intellectualized activity, also would include the types recognized by the more conservative groups. There is no fundamental difference of opinion concerning the meaning of the word, but the difference lies in the degree of elasticity that should be permitted. In every case a unit of purposeful, intellectualized activity is involved.

Since the word project has been secured by educators from the general English vocabulary, it is natural that similar misunderstandings with respect to its use should arise when attempts are made to associate the word with a definite educational concept. A present need in education, therefore, is to determine and agree upon whether the use of the term should be confined to situations involving complex intellectual difficulties, or whether its use should be extended so as to include the simplest of intellectual reactions. An agreement upon the use of the word will afford a common ground for discussion, thus avoiding apparent but not actual differences of opinion in reasoning that arise, if the same word to different individuals represents materially different or even slightly different concepts. If the broader meaning of the term project is agreed upon (a) the varying concepts of the term will be included, and (b) since the difference between a simple intellectual difficulty and a complex intellectual difficulty is relative, and since these difficulties in reality are aspects of the same type of mental development, the word may well be used to include all types of intellectual difficulties, with the class further subdivided into simple and complicated types.

The pedagogical word "project" should meet a real need. The word project may be used as a part of the general vocabulary that is drawn upon in discussing pedagogical problems without delimiting the use of the word in a specific manner. If the word is to be included in the nomenclature of the science of teaching, however, a specific use should be assigned to it. If there is another word in the pedagogical terminology that serves the same purpose, the recognition of the word project as a scientific term is undesirable, as there will be duplication of functioning, and consequent waste of energy.

In spite of striking similarities between man and other animals, it long has been recognized that there also are striking differences, particularly with respect to the possible activity level. In contradistinction to other animals, man can intellectualize his activities and direct them with a conscious purpose. There is need in education for a term that can be applied to the class of intellectualized activities that differentiate man from other animals. All such activities are purposeful although the quality of purpose differs decidedly. Since the word project as now broadly used, outside of educational circles, denotes this meaning, which finds its justification on the basis of need, with practically no violence to the meaning of the word, it readily can be included in the pedagogical terminology, to denote a unit of intellectualized activity.

The project method is the way of growth through which man is differentiated from other animals. All forms of life, plant and animal, instinctively make certain adjustments to their environments. These adjustments generally enable the life form to protect itself or to extend its influence in some positive fashion. A certain amount of development in making these successive instinctive adaptations occurs. Man, in common with other animals, make these instinctive adjust-

ments. If man's ability to develop were conditioned in the same way as that of other animals, practically no other method than the instinctive method would be possible. Since man can think, can plan, and can engage in sustained thought, he can intellectualize his activities in a way that somewhat abruptly differentiates him from other animals. Man develops, therefore, not only through the instinctive method, which is characteristic of the growth of all forms of animal life, but also through the project method, which is particularly reserved to man.

A project involves a complete unit of activity. The derivative meaning of the word project is "to throw forward" (pro-forward and jacere-to throw). As used in the educational field, the word project involves the idea of a plan that is to be carried out, but also carries with it something of the derivative meaning in that, through the project, material looms up before the child for interpretation, and the child, in grappling with this material, moves forward or grows. If a child seeks to meet a situation, he starts with the experiences and attitudes of his own life, and through his interpretation of the situation, increases or enriches his concepts. He starts with his own small world, or microcosm, and utilizes it in mastering situations by means of which his world becomes larger. Through the project the child relates himself to knowledge that is not a part of himself, but knowledge that is within his reach. He plunges out of his own world into the larger world, and returns with valuable experiences. These experiences, in turn, become a part of his ever enlarging world by means of which he again can interpret. A young child, with limited experiences, necessarily will engage in projects of a simpler nature, but as his personal world becomes larger and made up of more varied material, the situations that he can meet become increasingly

difficult. The concept denoted by the word project therefore involves the various steps, starting with the personal world of the child, by means of which he interprets related unknown material, thus enlarging and modifying his world of experiences and attitudes.

The significant development of the child, from the educational standpoint, comes through the project method. The public schools have been established, not with the idea of preparing the children for an animal existence, but for the purpose of preparing them for a human existence. It follows, therefore, that the activities of the school are concerned primarily with the project method, which is Nature's particular way of developing the child as a human being. There is no other method. Mankind, in general, has found that his progress has been most rapid, when he intelligently has moved in the direction indicated by nature. To the extent that results have been secured in school room practice, the project method should be given credit. If results apparently or actually have not been commensurate with the energy put forth, in some way or other the natural growth of the child has been blocked, either by surrounding him with material too far removed from his personal world, by surrounding him with material that possessed no unknown elements for his stage of development, or by placing insufficiently related unknown material within his grasp. If sufficient material properly is related to the child's world, and if the pupil keenly is interested in the material, rapid growth for a normal mind is inevitable.

The project method may be abused (a) by keeping the child in the same environment. Undue repetition of material may be, and often is, deadening. In geography, it is an unfortunate but not altogether uncommon practice to disregard or to discount the work previously accomplished. A

type study of the Eskimos may be made in the second grade. The third grade teacher may take up the same type and consider the same topics, concerning food, shelter and clothing. The teacher of one grade may consider the coal industry and the teacher of the succeeding grade may consider this industry practically in the same way. The teacher of history may consider the biography of Abraham Lincoln, or the development of the Erie Canal in one grade, and a succeeding teacher may consider the topics from a similar viewpoint. In the subjects of a mechanical nature, as arithmetic and spelling, a useless waste of time may be involved in drilling children upon material which they thoroughly have mastered. Many beautiful recitations are not so successful as a superficial examination indicates. A teacher, with respect to every recitation, should attempt to discriminate between what the children know and can do at the beginning of the recitation, and what they know and can do at the close. Each period should contribute something toward the definite enlarging of the child's experiences.

The project method may be abused (b) by placing insufficient, related, unknown material within reach. Every adult can recall the restless days of childhood when he craved for something to do. The child energetically considers one thing after another, trying to find something to do that to him seems worth while and that he believes he can do. A child, discouraged in his quest, may lie down to take a nap, quickly to jump up to continue his search for something to do. In the vegetable world, a plant thrives best where it has available needed nourishment in the right proportions and an otherwise suitable environment. Many dwarfed plants, perched on the rocky bluffs or in an otherwise unfavorable environment, make a pitiable struggle for an existence. No one can measure accurately the amount of retardation in de-