VOCATIONS

The World's Work and Its Workers

BY

WILLIAM MARTIN PROCTOR

Professor of Education

Leland Stanford Junior University

HOUGHTON MIFFLIN COMPANY

BOSTON · NEW YORK · CHICAGO · DALLAS · SAN FRANCISCO

The Riverside Press Cambridge

PREFACE

SINCE the passage of the Smith-Hughes Act, in 1917, there has been a phenomenal development of public vocational education. Coincident to that development, but not keeping pace with it, a considerable amount of attention has been given to the subject of educational and vocational guidance. The more complicated the social and industrial organization of society becomes, the greater becomes the task of helping boys and girls to find themselves, and the more help they need in discovering what their part in the world's work is to be.

The larger cities have set up extensive Bureaus of Guidance and Research. Provision has been made by some of these cities for many full-time and part-time counselors and guidance workers, whose business it is to help school children in the selection of their school studies and in deciding upon their life vocations. In addition to providing vocational counselors an increasing number of school systems offer courses in vocational information or vocational civics. When the question of a life career is uppermost in the mind of a youth no more concrete, practical, or helpful aid can be offered to him than that of putting him in the way of securing accurate and clearly stated information about vocations.

This book has been prepared with a view to meeting the need above stated. With the exception of the first three and the last two chapters, all of its pages have been devoted to descriptive material relating to the great fields of vocational effort by which the fifty-odd million gainful workers in America earn their living.

Instead of following strictly the United States Census occupational groupings, or arranging the vocations in alphabetical order, the descriptions of the various callings have been grouped into chapters according to the similarity of service

rendered or the type of ability necessary for success. Thus, Legal and Civic Vocations, Health and Healing Vocations, and Social-Service Vocations, have been treated in chapters by themselves. This method of treatment promotes continuity of interest, and enables the teacher to concentrate attention upon a related group of vocations. Material treated in this way is easier to recall and to understand than when each vocation is treated as an entity in itself. By this arrangement economy of space also is secured, since it is possible to deal in a single section with elements that are common to the entire group of vocations. This plan has made it possible to treat a maximum number of vocations within the compass of a classroom textbook.

Aids to instruction are provided in the "Seek-Further Questions and Suggestions," given at the end of each chapter. No single book can hope to describe in detail even the most common vocations. That is a task for the publisher of an encyclopedia of vocations. All that can be expected of a single-volume text on the subject is that those who read the brief accounts therein given may have their appetites whetted for more information about the vocations described. It is the purpose of these questions and suggestions to stimulate such further study and investigation. Much is of necessity left to the ingenuity of the teacher of the course, who will no doubt supplement the materials found in the text by materials gleaned from the daily papers, current magazines, biographies, and other sources.

The "Selected References" at the end of each chapter have been confined largely to the Bibliography (page 367). The books in this list which are starred are recommended to be purchased as a "Vocational Information Alcove" for the school library. There are specific page citations to the parts of the books in this list where each vocation is discussed. All of the books included in the list have appeared since the publication of Frederick J. Allen's *Guide to the Study of Occupations*, except the one by Catherine Filene on *Careers for Women*. The teacher should have a copy of Allen's book as a source of material published prior to 1921.

A feature of this book, which should commend it to deans for girls in secondary schools and colleges, is the attention that has been paid, in connection with the discussion of each group of vocations, to the part played in those vocations by women workers. Among the Selected References are included also the latest and best books which have been written from the standpoint of women's vocational opportunities. This special attention has been accorded to the place of women in industry, business, and the professions, because of the very rapid rise in the number of women who have entered the gainful callings, aside from teaching, during the past ten years.

Teachers of Life-Career, Vocational Civics, or Vocations classes, will find this book well adapted to their needs. It has been submitted, in manuscript form, to a number of teachers of such classes. Their suggestions have been embodied in the text, and their approval of the content and method of treatment has encouraged the author to feel that it will prove to be a suitable text for such courses. It is planned for a one-semester course, of eighteen or twenty weeks. Some of the vocational groups can be handled in two- or three-class periods, while others should receive a week or ten days of attention. The time to be devoted to each occupational group can be determined by the teacher, partly on the basis of the vocational interests of the pupils in the particular class, and partly on the basis of the importance of certain groups of vocations in the community where the class is being taught.

Other students, not enrolled in Life-Career Classes, will also find the book helpful. Vocational information has a cultural as well as a practical value. It is an essential part of a liberal education to know the kinds of work in which the world's workers are engaged. Hence, the reading of a book such as this might well be made a part of the required work in connection with courses in General Social Science, or Elementary Economics.

Secretaries of the various welfare organizations will find the book useful to put in the hands of their young protégés during

the "find-yourself" campaigns and "vocational-guidance" weeks which are carried on by such organizations. Vocational-guidance committees of Kiwanis, Rotary, and other service clubs will find the book suitable to recommend to the boys whom they have undertaken to counsel. The widespread interest of such organizations in the task of guidance, and their willingness to coöperate with the schools, should be capitalized by all teachers of Life-Career classes.

The author wishes to express his gratitude to Dr. W. T. MacQuarrie, President of the San José State Teachers College, and members of his teaching staff, for helpful counsel and valuable suggestions made during the preparation of the manuscript of this book; to Dr. Harold Benjamin, of Stanford University, for the opportunity to try out the book in a Vocations Class in the Palo Alto Union High School; to Miss Jessie Gibson, Dean of Women, Pomona College, for the critical reading of the completed manuscript; and to Miss Catherine Loud, for invaluable assistance in compiling the chapter bibliographies. Especially is the author indebted to Dr. Ellwood P. Cubberley for the original suggestion that he undertake the writing of the book, and for reading and editing the completed manuscript.

WILLIAM MARTIN PROCTOR

STANFORD UNIVERSITY
CALIFORNIA

此为试读,需要完整PDF请访问: www.ertongbook.com

CONTENTS

I. What One Ought to Know About a Vocation 1

II. What One Ought to Know About Oneself . 17

III. How to Combine Knowledge of Self and Vocational Knowledge in Selecting a Vocation 31

IV. Agricultural Vocations Involving General Farming and Stock-Raising 48

V. Agricultural Vocations Involving Gardening, Floriculture, Horticulture, Fishing, and Forestry 63

VI. Steam and Electric-Railway Transportation 78

VII. Highway, Water, and Air Transportation; Telegraphic, Radio, and Mail Communication 94

VIII. Mining Vocations 111

IX. Factory Workers 121

X. Metal Working, and Printing Trades . . 138

XI. The Building Trades 158

XII. Home-Making, Food, and Shelter-Providing Vocations 171

XIII. Personal and Domestic-Service Vocations . 186

XIV. Business Vocations Involving Clerical and Secretarial Service 195

XV. Business Vocations Involving Sales Service 208

XVI. Business Vocations Involving Banking, Brokerage, and Exchange 220

XVII. Artistic Vocations Requiring Ability in Design 234

XVIII. Artistic Vocations Requiring Dramatic, Musical, or Literary Ability 247
XIX. Exploration and Research Vocations . . 257
XX. Engineering Vocations 273
XXI. Legal and Civic Vocations 285
XXII. Health and Healing Vocations . . . 301
XXIII Educational Vocations 317
XXIV. Social-Welfare Vocations 331
XXV. Preparing for, Finding, and Keeping a Position 345
XXVI. Making a Life While Making a Living . . 356
Bibliography 367
Index 373

VOCATIONS

CHAPTER I

WHAT ONE OUGHT TO KNOW ABOUT A VOCATION

Learning about vocations. One of the greatest manufacturers in this country, Mr. Henry Ford, when asked to give a word of advice to the youth of America, said: "You will never be content or happy unless you find the way to work — to some useful occupation — whatever it may be. If your ambition is to be idle you are doomed to inevitable failure." This book has been written in the hope that it will be of assistance to many American boys and girls in their effort to "find the way to work — to some useful occupation." The writer, as a boy and as a young man, working his way through high school and college, had the good fortune to engage in fourteen different kinds of work: office boy, cash boy, paper carrier, helper in a tomato canning factory, clerk in store, tinsmith's helper, garden hand, harvest hand, firer of a hop kiln, lumber-jack, mucker in a silver mine, chainman in a surveying crew, stenographer in a law office, private secretary to a college president. This varied experience was an ideal way to learn about many different vocations, but very few boys to-day are so fortunate.

In these days it is usually necessary to learn about vocations by reading books, magazine articles, and other literature, or by asking questions and observing those who are engaged in different kinds of work to see what they do. There are so many different kinds of service which people perform, and so many distinct vocations, that one could not possibly find time to have first-hand experience in more than a very few of them. That is why it is important for us, while we are yet in school, to study

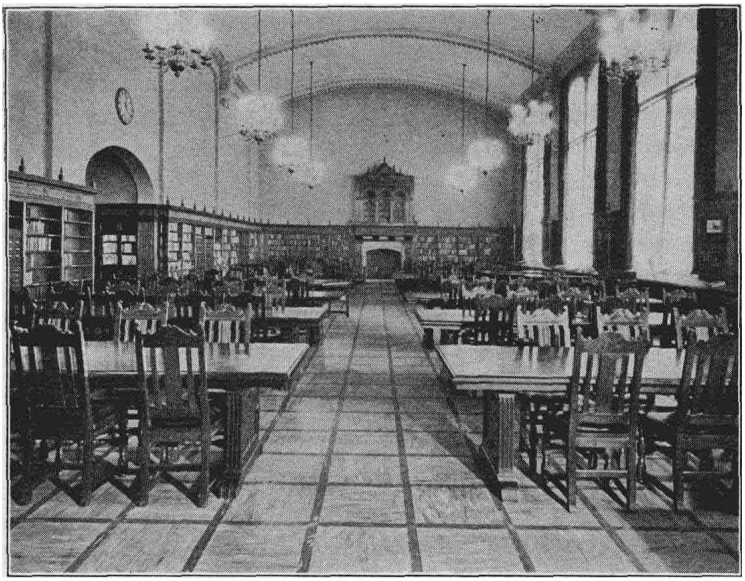
about the world's work and its workers. Even though we can try but a few vocations ourselves, such trials help us to become broader-minded and more interested in other people if we know something about the tasks which they perform in their various ways of making a living.

In making a study of a vocation it will be helpful to know what to look for, what to ask about, and how to proceed in gathering the necessary facts. That help is what this first chapter is going to try to supply. It is to serve as a kind of measuring stick which we can take with us into the study of a vocation when we are trying to find out whether or not it is the work we would choose for a life-career.

1. *Analysis of the vocation*

Nature of the work. The first question one should ask about a vocation is this: "What is it?" Suppose you are interested in becoming an engineer. You look in the dictionary and find that an engineer is defined as "a person who manages or runs an engine." But you say: "I do not want to be that kind of engineer; I want to be the kind of engineer who plans bridges, lays out railroads, and surveys land." In trying to find out all you possibly can about that type of engineering, you will discover that there are a great many different kinds of engineers, and that many books and magazine articles have been written describing just what sort of service each kind of engineer performs.[1] In order to become well informed about engineering you will want to read as many of these books and articles as possible. You will also want to meet some persons engaged in the type of engineering in which you are interested in order to ask them questions, and if possible see them at work. A little later on you may even have an opportunity to secure employment for a summer as chainman or axe-man in a surveying crew. In these different ways you will be able to learn a great deal about the vocation that will be helpful to you in considering it as a possible life-career.

[1] See Chapter XX on Engineering, pp. 273–283.



AN UP-TO-DATE SCHOOL LIBRARY

High School libraries provide many books that describe different vocations

Needed vocational information. There are certain specific items of information which should be known about a vocation by the person who is thinking of entering it. For example, one should consider the importance of the vocation. This can be judged in various ways. One way is to find out how many people are making a living in that vocation. Nearly one third of all gainful workers are engaged in some agricultural vocation. This fact indicates that farming is an important vocation. Another way to estimate the importance of a vocation is to inquire into the type of service which it renders. Again farming is important from this point of view, because food production is dependent upon the result of farming operations. Every person in the country is concerned to have the food supply maintained. But there are some vocations in which comparatively few persons are engaged but which are nevertheless

vastly important. There are not many inventors, but one of them, Thomas A. Edison, has been responsible for inventions on which great business and manufacturing enterprises are based and which represent thirteen billion dollars of investment, as well as unmeasured benefits to humanity in comforts and enjoyment of life.

Supply and demand for workers. The supply and demand for workers in the vocation you are considering should also be investigated. Some vocations in which many workers were employed fifty years ago are no longer considered desirable because the number of workers required is rapidly decreasing. Harness and saddle makers used to find ample employment, before the coming of the truck and the automobile; their numbers have been reduced until at the present time there are less than two thousand persons engaged in this vocation. On the other hand, only fifteen thousand workers in automobile factories were reported in 1910; in 1920 eighty-three thousand were reported, and in 1928, one automobile manufacturer alone had more than one hundred and twenty thousand employees. Before deciding to prepare for a vocation it is therefore wise to find out, if possible, whether it is a vocation which is likely to increase or decrease in importance.

Physical conditions surrounding workers. The physical conditions of a vocation should be studied. Some vocations are dangerous to life and limb. This danger is not necessarily a reason for avoiding them. It might even be an incentive to persons who enjoy taking risks and doing difficult things. Many vocations are unnecessarily dangerous. Added to the natural hazards of the vocation itself there are often conditions which tend to increase those hazards — perhaps safety devices are not installed; equipment is not inspected; proper precautions are not taken. Then, too, there are certain occupational diseases — kinds of illness which attack workers in certain fields. Miners in certain mines are subject to arsenic poisoning; painters are subject to lead poisoning; paper hangers are affected by dust from some kinds of wall paper; stone cutters

此为试读,需要完整PDF请访问: www.ertongbook.com

suffer from inhaling the powdery dust from their power-driven stone-cutting tools. Factory workers sometimes have to work in poorly lighted, unsanitary, crowded work-rooms.

Conditions unfavorable to health and safety are not confined to any particular vocations, but may exist in almost any of them. The worker should know what to look for, and, if possible, avoid those industries or individual employers who do not make every effort to surround their workers with comfortable, safe, and healthful conditions for their daily work. In considering business and professional vocations also the conditions under which one will have to work should be borne in mind: the traveling salesman must be away from home a great deal of the time; the sales person is on his feet most of the day; the doctor is on call at any time of day or night; the lawyer is subjected to long periods of strain during the trial of important cases; the school teacher has to adjust himself to forty varieties of disposition during the day, and spend long hours correcting papers at night. Every vocation has its disadvantages, as well as its advantages, and these should be well understood by the young person who is thinking of entering any particular field of employment or service.

Regularity and permanence of employment. Some vocations are seasonal — that is, a great many workers are employed at certain times of the year, and at others very few are required. When farmers are harvesting their grain they need thousands of laborers for a few months, but they could not possibly keep all these workers employed throughout the year. The canning season in the fruit and vegetable canning industry calls for thousands of workers during a part of the year, and for very few the rest of the time. Certain trades are seriously affected by weather conditions. Those who work at these trades either have to make enough during the busy season to support themselves during the slack season, or find other work to do between seasons. It is estimated that there are always more than a million workers out of employment in this country, and when industrial conditions are bad, this number sometimes increases

to ten per cent of the gainful workers. These facts make it clear that the permanence and regularity of employment should be taken into account in selecting a life-career.

Leisure and vacation time. The number of hours a day which are required of the workers is another point to be considered. An eight-hour day with a half-day off on Saturday means that a worker will have considerable time for rest and recreation. A ten- or twelve-hour day with six full working days, or even seven, which is still the rule in some industries, means that the worker is going to have almost no leisure time at all. Some employers plan to give their employees a two weeks' vacation with full pay each year. School teachers have two or three months' vacation. Other employers do not plan for any vacation at all, unless the worker wishes to take time off at his own expense and take his chance of finding his position open and waiting for him on his return. Since one's fitness for doing good work depends upon the way one spends his leisure hours, it is worth while to find out all you can about this aspect of a proposed vocation.

Not only should one know what the amount of leisure and vacation time in a particular vocation is likely to be, but one should begin, early in life, to learn how to spend leisure and vacations in a happy and profitable way. Hobbies, such as making collections of interesting objects; sports, in which one can continue to engage in adult life; and artistic skill, either in music or handcrafts, make it possible for one to enjoy leisure time in a satisfactory manner.

Income or wages. What wages one may expect is another important item to be investigated. It is not a good idea to think of a vocation solely from the point of view of the amount of income that it may possibly bring in. Some vocations in which men earn large incomes are not desirable because they are too dangerous to health, while others are not desirable because they involve doing things which are illegal or against the welfare of others. On the other hand it is necessary to consider what income a vocation will yield in order to determine

whether such work will support the worker adequately, and allow him to take care of his family or other dependents.

Some good principles to keep in mind, when considering the income of a vocation, are these:

First principle: Is the pay at the beginning approximately as high as it will ever come to be? The answer to this question will help one to discover whether there is a chance for promotion and increase of pay. Some jobs pay fairly high wages to beginners, because the work is so easy to learn that long experience does not greatly increase efficiency. In other situations the pay at the beginning is low, and promotion rather slow and hard to earn, but the pay for the better positions is high. The latter type of position is preferable. It is better to accept a small wage at the start where there is an opportunity for growth and development, as well as for an increase in income, than to take a position where the wage at the beginning is high but where opportunity for increased efficiency is small.

Second principle: the regularity of the income. Does the income from the vocation come in regular monthly or weekly installments, or is it irregular — now a small sum and again a larger amount? This is an important item. When one's income is regular one can meet monthly bills promptly and establish habits of regularity, but when one's income is irregular it is easy to get into careless habits in paying debts. A regular income also makes it possible to budget one's expenses; that is, to plan beforehand just how much can be spent for rent, food, clothing, recreation, etc., and how much can be set aside for the savings account.

Third principle: the source of the income. Is the employer responsible and able to pay what he offers? Every year there are thousands of workers who fail to receive the wages which they have earned. Sometimes the employer is honest, but has underestimated the cost in bidding on a contract and fails, thus causing great loss to his employees. Often, however, there is deliberate fraud. People are induced to go to work with promises of large wages, but after they have done the work there is

no money to pay for the services rendered. Any advertisement which promises large pay for a small amount of work is to be regarded with suspicion. It is usually only an alluring kind of bait used to catch the simple-minded.

Retirement salary or pension. This provision should be considered in estimating the income and rewards of a vocation. An increasing number of public-service corporations, as well as a great many established industries, are making provision for retirement allowances or old-age pensions for their employees. Sometimes, in fact more often than not, the employee makes a small monthly payment toward this pension and the employer deposits a similar amount with the State, or with some annuity insurance company, and at a certain age, after a given number of years of service, the worker is entitled to draw an allowance. Such allowances are especially important for persons whose salaries are not high, and whose incomes are such that it is difficult to save enough to take care of oneself in old age. There are also casualty and disability incomes provided by State Workingmen's Compensation Acts, whereby employers are required to guarantee payments to employees for loss of time on account of accidents which happen in connection with their work. A position with an organization that provides retirement pensions and accident and sickness benefits is much more desirable than one with an organization that does not offer such assistance. Such protection means peace of mind and freedom from worry. Increased efficiency on the part of the workers is thus made possible.

Opportunities for advancement. There are many vocations which are called "blind alley" jobs because they are like alleys which end in the middle of a block — they lead nowhere. In such vocations the beginning pay is usually approximately as high as that which is earned after several years of experience, and the tasks to be performed do not change much from beginning to end. Ambitious young people will not hold such positions long, but will be looking around and preparing themselves for positions which have in them opportunities for advance-

ment. In well-established industries there are usually well-defined lines of promotion. The beginner is willing to take small pay and do hard work if he can see that faithful service leads, within a reasonable time, to the next higher round on the ladder. Section hands have been known to go up through all the stages of advancement to the position of president of the railroad. Office boys, or filing clerks, or stenographers not infrequently earn their way to managerships or presidencies of their corporations. These promotions are usually won, not by merely wishing for them, but by working and preparing for them. The most intelligent worker will seek to find a vocation which has in it real opportunities for promotion, and will then study his job to find out how the promotion may be earned. One of the most sought after kinds of advancement is that which makes one independent; that is, gives him an opportunity to become a proprietor or an employer himself. This stage of progress, however, comes to most people only after a number of years of apprenticeship in working hard and faithfully for other people.

Social and moral hazards. There are kinds of work which in themselves are attractive, both from the standpoint of earnings and possibilities of promotion, but which are undesirable for other reasons. Before deciding definitely upon a vocation it is a good idea to look into the kind of social and moral surroundings the vocation will offer a worker. Is it possible for the worker to live in a community where there are good schools, churches, libraries, and other social and cultural advantages? With what sort of persons will he be associated in his daily work? It may be said that by the time we are able to enter a life-career we should be strong enough in character to enter any respectable vocation without fear of injurious influence upon ourselves. It is nevertheless true that we owe it to ourselves to find types of employment which do not involve constant exposure to wrong doing, or which do not constantly force us to associate with people who have low moral standards. A person might be able to take care of himself in such surroundings,

but he would not wish to bring up a family under such influences. The kind of community that our vocation will require us to live in, and the kind of people with whom we will be associated, must be included in our study of a life-work.

Contribution to life's ideals. We all have day-dreams in which we think of ourselves as occupying positions of importance and influence in the world. It is one of the glories of America that so many boys and girls have been able to realize their youthful dreams. Another remarkable feature of American life has been the willingness of our young people to work at any kind of job while securing an education to fit themselves for the service which they would most like to render in the world. It is a good thing, therefore, to ask ourselves if the thing we now think we would like to do will make it possible for us to reach our life's highest goal. Shall we be able, while working in this vocation, to develop the qualities and acquire the training that will help us to realize our ambition? If following a certain vocation because of the income it furnishes tends to divert us from our main object in life, it would be better to live temporarily on a smaller income and stick to the main line than to be permanently side-tracked. There is much sound sense in the old adage — "Hitch your wagon to a star." Aiming at a worth-while goal gives us a standard by which to measure the desirable features of possible vocations. Whatever the attractive features of a vocation may be, if it does not lead in the direction which we would like to have our life take, we would better turn to some other vocation which does lead in that direction.

2. *Preparation for the vocation chosen*

General education. The more all-around education one can have the better. The work of the world is coming more and more to be placed in the hands of those who have been trained for the tasks which they undertake to perform. The uneducated and untrained are the last to be employed and the first to be dismissed when there is a slack season. In the United

此为试读,需要完整PDF请访问: www.ertongbook.com