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VOCATIONAL EDUCATION IN A DEMOCRACY

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FOREWORD

For almost two decades, the authors have been closely associated personally and professionally in the work of vocational training. They have seen this movement develop from an idea into a recognized and established public policy. Before entering upon vocational education as a calling, both of them were engaged for a considerable time in the work of regular education—a field in whose aims and processes they have never lost their interest. In vocational education, they have frequently served as colleagues in the same enterprises. Sometimes they have been widely separated. At all times they have kept up a close connection with each other and with a rapidly developing, constantly changing field of service.

Circumstances have operated to give them an unusual opportunity for contact with the administrative and pedagogical problems which confront agricultural, home making and commercial schools and classes of almost every type, and a wide and intensive experience, almost unique in character, in the field of industrial and trade training. Connected at various times and in various capacities with public schools, with private schools, and with the training schemes of shops and factories, they have had at least an opportunity to see from a wide variety of angles the educational needs of the citizens of America; the relationship of vocational education to general education; and of both to the stability, progress and conservation of this democracy. These facts constitute whatever justification this book may have.

As a result of this experience and their close personal association, the authors have arrived at a meeting of minds upon certain convictions, certain principles and policies regarding both

regular and vocational education. These, they have undertaken to set forth in two books—the first on “Vocational Education in a Democracy” and the second on “Social Education in a Democracy” soon to follow. This book has to do with the underlying principles which the authors believe apply to all forms and grades of vocational education of secondary grade; with the policies which schools and occupations must adopt in order to meet the mass need for practical training in this country; and with the methods which must be used, if we are to develop, as we should, our priceless asset of human resources properly trained.

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**VOCATIONAL EDUCATION
IN A DEMOCRACY**

VOCATIONAL EDUCATION IN A DEMOCRACY

CHAPTER I

WHAT IS VOCATIONAL TRAINING?

Education means many things to many men. To the classicist, it is the ability to derive enjoyment from the study of the writings of the ancient philosophers, poets and writers. To the culturist, it is the ability to enjoy the finer things of life. To the scientist, it often means a command of the special knowledge that goes with his specialty.

Lying back of all these conceptions, and of many more that have been held during the history of civilized mankind, has run an underlying idea, often obscured in educational controversy, but persisting nevertheless. This underlying idea may be expressed somewhat as follows: Education is the result of experiences whereby we become more or less able to adjust ourselves to the demands of the particular form of society in which we live and work. There may have been, and in fact there still are, differences of opinion as to what experiences will best lead to this social adjustment; but so far as the fundamental notion goes, it has always been accepted by most teachers. In this broad sense, the word education will be used in this book. It will signify the sum of all experiences which, in their results, so affect the habits, the thinking, the decisions of human beings that they are able to adapt themselves to their social environment and so meet its demands with at least some measure of success.

For untold ages the human race has been securing experiences. The sum of these experiences constitutes what has been called the "heritage of the race." Man has gradually learned how to live under the limiting physical conditions under which he must exist. Through long ages he has learned something of the control of natural forces and how to use them for his benefit. He has learned how to express his emotions in literature, in art, in poetry. He has learned something of how to organize himself into social groups so that cooperative effort may accomplish what the isolated individual can not do alone. And he has learned how to work!

All this mass of past human experiences must be in some way transmitted from generation to generation and this transmitting process, by whatever agencies it may be conducted, is the educational process that has gone on since the dawn of history.

What is vocational education?—If the conception of education just suggested but not specifically embodied in words be accepted, then vocational education becomes that part of the experiences of any individual whereby he learns successfully to carry on any gainful occupation. This is the broad sense in which the word is used in this book.

The narrower use of the term—In addition to the broad definition of vocational education just given, it must be recognized that it is also used in a narrower sense in which it implies the existence of a series of controlled and organized experiences used to train any person or persons for any given employment.

A boy gets a job in a plumbing shop. He cubs around with the journeymen. He has some opportunities to observe the practice of the trade. He has some opportunity to ask questions which may or may not be answered by the journeymen. He may possibly make some use of books with which he struggles as best he can. He may have some little chance to use tools and acquire some manipulative ability. He may get some accidental contacts with the literature of the trade. Under such conditions

whatever skill he acquires he gets mainly by imitation. Whatever general information he receives is haphazard. If this kind of experience goes on long enough and if the boy has sufficient intelligence, he will ultimately secure a fair command of the trade as a journeyman. This is the way that most men acquire a trade, and is what may be called unorganized vocational training. It might in most cases at least be described as chance or haphazard vocational training.

On the other hand, let us suppose that this same boy has been given an opportunity to secure through organized instruction as an apprentice, the technical content of the trade; that he has been given an opportunity to learn the practice of the trade under the skilled direction of competent plumbers; that, in short, he has been assisted in all the various ways by which competent instructors can assist a learner. Three things will be sure to result: First, he will be a better plumber because he will know more of the theory of his trade and he will be a better worker because he has learned standard practices from first-class men. Second, he will have progressed much more rapidly and with much less discouragement and wasted effort. Third, the boy who is potentially a first-class plumber will in most cases be saved to the trade, whereas under haphazard methods, he would be driven out by discouragement and difficulties. This systematic controlled use of the experiences in any occupations for training workers may be called organized vocational training.

The term vocational education as used in the broader sense here covers both unorganized and organized methods of securing occupational confidence and proficiency. The narrower or technical use of the term will apply only to the second type or method of training.

Vocational education nothing new—Ever since the human race began its long struggle to conquer its environment, manual skill and job knowledge have, in one way or another, been transmitted from man to man and from generation to generation.

Every time a new discovery added to the assets of the human race, there arose the necessity for diffusing this knowledge in some way and for transmitting the necessary special manipulative skill to put it into practice. Even what might be called the usual or customary occupations and processes of primitive men had in some way to be acquired by new recruits and these same occupations and processes had in some way previously to be acquired by those who preceded these novices.

Vocational education and the social recruit—It is probably true that all the phenomena of vocational training in modern society have their roots in the past. In a sense at least we are not dealing with anything new, but only with expansions and developments of what has always existed. Youth has always been regarded as an asset to the social group by family, tribe or state. Primarily he was a defensive and hunting asset so that probably the first vocational training objective was in the use of arms for combat and for providing food. The safety of the group being so vital, it is also probable that this kind of training was the first to take conscious and organized form. Training in the use of arms is probably one of the oldest activities of the teaching profession.

Next in importance from the standpoint of social survival and progress was the value of youth as an immediate and a prospective labor asset; hence the problem of giving what we would now call vocational education to social recruits. This also appears early in human history.

Vocational education in the family—This primitive vocational training appears to have taken one of two forms. It was either acquired by the youth in the family, or was acquired through observation and practice from the more mature members of the social group. On the whole the training he secured for what we would now call production jobs, such as the care of animals and the tilling of the soil, was secured within the family circle. What he secured in the practice of arms was probably gained from the better warriors of the community.

In the primitive stage of human development there was probably nothing but work, and all jobs were "work jobs." It is fair to assume that certain individuals showed some pre-eminence in this or that special line of work. Often some one would discover a new way to do an old thing or an entirely new thing. In either case, the tendency would naturally be to assign certain youth to the more expert individual so that they could obtain from him, probably largely by imitation, the special knowledge and skill which he possessed. This is, in essence, the helper system.

Bartering ability for teaching—If human nature was the same in those days as it is today, the man who possessed special proficiency by virtue of discovery or special aptitude or long experience would regard that proficiency as a special personal asset. He would make it the basis of barter and trade, both for his services as a producer and as a teacher for imparting what he knew and could do. In short he would establish a monopoly. He was probably left in the enjoyment of his monopoly until it became recognized that the knowledge which he possessed was so vital to the common good as to require its use by others as well.

The development of the idea of organized vocational training—As time went on it gradually appeared that the individual who wished to learn could be handled by methods and devices more effective than mere observation or imitation or incidental participation. By the organization of training experience under competent instructors conscious of their responsibilities, the process of transmission was rendered more rapid and more effective, a stage in vocational education which is still in progress of development at the present time.

The present stage of development of vocational education—We still have and probably always will have, in modern Society, all the forms or kinds of vocational education just described. Most farmer boys still learn farming in a more or less haphazard way from their fathers. At the same time, agricultural schools and colleges are making rapid progress in the systematic teaching

of agriculture to increasing numbers. Most girls still learn the duties of housekeeping from their mothers, but organized instruction in home economics has become a recognized part of many school curricula. Most workers in industry still learn their jobs by the "pick up" method where observation, imitation and individual initiative are the only means of training. But here, too, increasing opportunities for securing organized training are now being offered by employers, by schools, by workers themselves and by cooperation between these agencies.

The generally accepted principle that only a person who is himself competent in an occupation can give effective vocational instruction for that occupation is the modern recognition of the value of the specialist in transmitting knowledge and skill. Today, as always, every new discovery of science or new invention of recognized value finds its way into general practice in every field through instruction given to others by the original discoverer and his followers. Only in this way does it become a permanent addition to the sum of human knowledge.

The large part played by unconscious training—Reference has already been made in this chapter to organized and unorganized training. When we study the various ways in which people learn how to do things, we find, in general, two attitudes or states of mind on the part of the learner and two ways by which the learning process is conducted. The learner may be either conscious or unconscious of the fact that he is learning. This may be true whether the learning experiences are organized or unorganized, though it occurs more commonly under the latter condition.

This unconscious training plays a much larger part in vocational education than is commonly realized. In fact, this is true of all forms of education. We learn much by imitation, by casual observation and perhaps still more by unconscious absorption. This fact is common knowledge to us all. It is the way in which we acquire table manners; it is the way in which most

of us gain what we know of social etiquette; it is the way in which most of us, especially men, have learned to cook or to sew on buttons; it is the way in which children obtain most of what they get from their elders or from other children.

Under all these conditions the individual, whether adult or child, is usually entirely unconscious of the fact that he is going through any sort of a learning process, that he is "learning anything." Not only is he unconscious of this fact, but in most cases the "instructor" is equally unconscious that he is teaching anything. In technical language the relation of instructor and learner is consciously recognized by neither party.

On the other hand, we do learn much as we go through life where the relation of the instructor and learner is recognized. When a child goes to school he understands that he is there to learn from the teacher, and the teacher recognizes a responsibility for giving instruction. This is not confined to the schools, however, but is equally true wherever some one individual who knows something or can do something is called upon to transmit what he knows to a group wanting it. When a well-known financier addresses some social club such as a Rotary or Kiwanis Club, on some phase of finance concerning which the members wish to be informed and on which he is a recognized authority, we have the relation of conscious instructor and conscious learner set up just as much as in the school room.

Conscious vocational education defined—Conscious vocational education, then, may be defined as the transmission of knowledge or skill under conditions where, on the one hand, the function of the instructor is recognized, and, on the other hand, the need of the group for instruction is recognized. The man who feels the need for certain training and avails himself of the use of a library in which writers of books become his teachers, is carrying on an educational process of which he is perfectly conscious. On the other hand, the man who writes such a book is equally conscious of the fact that he is endeavoring to place at the disposal

of his readers something in which he is presumably a specialist. The school, after all, merely becomes a place where the work of the teacher and learner can be carried on more effectively.

Unconscious vocational education unorganized—It seems obvious that all unconscious vocational education is generally unorganized in the sense that it is not controlled, and therefore operates largely by chance. Yet this educational process may be said to be organized to the extent that it is controlled as to the factors which make for efficiency. It may be said to be unorganized to the extent to which the control does not extend to all these factors.

If the aim, for example, is clearly defined and understood—that is, if the instructor knows exactly what knowledge and skill it is his job to impart—to that extent the instructing process is organized. If ineffective methods of teaching a good course are used, to that extent the instructing process is unorganized. If the progress of the learner is so planned that he goes from step to step in the easiest way, to that extent the training may be said to be organized. If the teaching devices, though good, are not adapted to the characteristics of the group to be taught, as when methods found successful only with children are imposed on adults, the training is, to that extent at least, poorly organized.

It is indeed quite possible to have a training course highly organized on the mechanical or administrative side and yet very poorly organized with regard to other efficiency factors, such as the recognition of group characteristics, very clearly defined aims, and the use of the most effective teaching devices. It is equally true that a poor mechanical organization, although accompanied by a very good organization from the standpoint of these other factors, may reduce the efficiency of the whole training program. It is conceivable that an educational scheme might be sound and well planned on what might be called the strictly pedagogical side and yet fail because of its lack of well-organized machinery.